

Air Quality Impact Statement (AQIS) Report

Proposed Development Site
1241 W. Division Street
Chicago, Illinois 60642

November 10, 2021

Prepared for:

LPC Acquisition Company, LLC
One North Wacker Drive, Suite 1925
Chicago, Illinois 60606

Prepared by:

Roux Associates, Inc.
1200 Harger Road, Suite 800
Oak Brook, Illinois 60523

Signature Page

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Mir A. Seyedabbasi, PhD, PE
Senior Engineer

November 10, 2021

Michael Hillebrenner, PE
Principal Engineer

November 10, 2021

ROUX ASSOCIATES, INC.
1200 Harger Road, Suite 800
Oak Brook, Illinois 60523

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List of Acronyms & Abbreviations

AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
AERMAP	AERMOD Terrain Preprocessor
AERMET	AERMOD Meteorological Data Preprocessor
AGL	Above Ground Level
AMS	American Meteorological Society
AMSL	Above Mean Sea Level
AP-42	USEPA Compilation of Air Pollutant Emission Factors
AQIS	Air Quality Impact Statement
Btu	British thermal unit
°C	degrees Celsius
CDPH	Chicago Department of Public Health
cfm	cubic feet per minute
EF	Emission Factor
g	Gram
GUI	Graphical User Interface
hp	horse power
IEPA	Illinois Environmental Protection Agency
kv	kilovolt
LPC	LPC Acquisition Company, LLC
MBH	Million Btu-per-hour
M	molecular weight of the gaseous pollutant
MET	Meteorological
MOVES	Motor Vehicle Emissions Simulator
mph	mile per hour
NAAQS	National Ambient Air Quality Standards
NED	National Elevation Dataset
NEPA	National Environmental Policy Act
NO2	Nitrogen dioxide
NOx	nitrogen oxides (NO and NO2)
NWS	National Weather Station

PDM	Project Data Manager
ph	phase
PM	Particulate Matter
PM2.5	Particulate matter with aerodynamic diameter less than 2.5 microns
PM10	Particulate matter with aerodynamic diameter less than 10 microns
ppb	Parts per billion
Roux	Roux Associates, Inc.
Site	Proposed Development Site, 1241 W. Division Street, Chicago, Illinois
SQL	Structured Query Language
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
µg/m ³	Micrograms per Cubic Meter

Executive Summary

On behalf of LPC Acquisition Company, LLC (LPC), Roux Associates, Inc. (Roux) has prepared this Air Quality Impact Statement (AQIS) Report for the proposed redevelopment site located at 1241 W. Division Street in the City of Chicago, Illinois 60642 (Site). The purpose of this AQIS Report is to present the results of an air dispersion modeling analysis to evaluate the potential impact of the proposed redevelopment at the Site on the ambient air quality in the surrounding area. This air quality analysis was performed in accordance with the requirements of the Chicago Department of Public Health's Air Quality Impact Evaluation Interim Guidance publication dated September 2021 (CDPH, 2021).

The intent of the ambient air impact analysis is to evaluate whether the proposed redevelopment project at the Site is protective of the National Ambient Air Quality Standards (NAAQS). NAAQS are maximum concentrations of criteria pollutants in the ambient air that are required by the Clean Air Act to be established by the United States Environmental Protection Agency (USEPA) under the Clean Air Act at levels that are protective of public health.

For purposes of this air quality analysis, it was assumed that the proposed stationary equipment consists of sources related to typical building support functions such as steam or heat generation, fire suppression systems, or emergency power generation. Currently, the only proposed combustion sources for the Site are four 2,600,000 Btu-per-hour space heaters. Specifically, two 20,000 cubic feet per minute (cfm) recirculating makeup air units (2,160 MBH, 15hp motors, 460kv/3ph) will be ceiling mounted on Warehouse Level 1 and two 20,000 cfm recirculating makeup air units (2,160 MBH, 15hp motors, 460kv/3ph) will be roof mounted Warehouse Level 2. It was conservatively assumed that all operating units work 24 hours per day for 365 days resulting in 8,760 hours per year. It should be noted that all equipment will be roof mounted, but those units serving the warehouse level 1 will have duct work into the space.

The offsite portion of the study estimated mobile-source emissions of Nitrogen Dioxide (NO₂), particulate matter less than 10 micrometers aerodynamic diameter (PM10) and particulate matter less than 2.5-micron aerodynamic diameter (PM2.5), associated with the proposed facility and intersections, which was identified in a completed Traffic Impact Study, prepared by V3 Companies on April 22, 2021, and updated on June 10, 2021 (V3, 2021). Off-site emissions estimates were modeled using EPA's Motor Vehicle Emission Simulator (MOVES) emission modeling system.

MOVES Version 3.0.2 at a project scale was used for project-level conformity analysis where link—level analysis was required. A link is a segment of road or an “off-network” location where a similar type of vehicle activity occurs. This project scale analysis required user-specified data at the link level for activity and fleet inputs that describe a particular transportation project. The Inventory calculation type was selected where mass of pollutants within a region (i.e., on-road and off-network links) and time span (i.e., specified hour of one season of a particular year) was utilized.

Dispersion modeling was conducted using BREEZE AERMOD model Version 10.0 that includes the latest version of the U.S. EPA-approved AERMOD dispersion modeling system (AERMOD Version 21112). American Meteorological Society/Environmental Protection Agency Regulatory Model (AERMOD) is a gaussian mathematical dispersion model that can predict ambient concentrations of pollutants that result from releases to the atmosphere. AERMOD uses hour-by-hour meteorological data to predict the patterns of ambient concentrations of pollutants over time.

To evaluate the potential impacts of emissions from the proposed Site redevelopment on the public, the dispersion modeling evaluation must consider the existing background concentrations of pollutants in the area where impacts are being evaluated. The background concentration of a given pollutant is added to the modeled impact from the proposed Site redevelopment, and the result is compared to the NAAQs. The NAAQS are allowable concentration limits applied at the public access boundary.

The model predictions indicate the potential impacts from stationary and mobile sources related to the activities after the proposed redevelopment project is completed and the Site is open will be negligible and therefore will not lead to localized exceedances of the National Ambient Air Quality Standards for NO₂, PM10 and PM2.5. The highest 1-hour average NO₂ concentration reach as high as 80 ppb (below the NAAQS of 100 ppb). The highest annual average NO₂ concentration is of the order of 16.8 ppb (below the allowable NAAQS of 53 ppb). The highest 24-hour average PM10 concentration of 92 µg/m³ is also below the 150 µg/m³ NAAQS. The highest 24-hour average PM2.5 concentration reach as high as 23 µg/m³ (below the NAAQS of 35 µg/m³). The highest annual average PM2.5 concentration is of the order of 9 µg/m³ (below the allowable NAAQS of 12 µg/m³).

The estimates may reflect conservative assumptions regarding vehicle utilization and facility-related activities. Predicted concentrations generally decrease rapidly with distance from the Site boundary, characteristic of the dispersion of emissions from a ground-level (area) source. In addition, the AP42-based value for the space heaters is based on assumption that the heater units run 24 hours per day for 365 days a year and may greatly overestimate actual emissions. It is unlikely that the heaters will run all the time throughout the entire day or during certain seasons (e.g., summer).

1 Introduction

On behalf of LPC Acquisition Company, LLC (LPC), Roux Associates, Inc. (Roux) has prepared this Air Quality Impact statement (AQIS) Report for the proposed redevelopment site (Site) located at 1241 W Division Street in the City of Chicago, Cook County, Illinois (**Figure 1**). The Site is located in the southwest quadrant of Division Street & Elston Avenue in Chicago, Illinois. The purpose of this AQIS Report is to present the results of an air quality impact analysis designed to evaluate the potential site operation impact on the ambient air quality.

The intent of this AQIS is to evaluate whether the proposed Redevelopment Project at the Site is protective of the National Ambient Air Quality Standards (NAAQS). NAAQS are concentrations of specific pollutants in the ambient air that are established by the USEPA under the Clean Air Act at levels that are protective of public health. When the measured concentrations of these specific pollutants in the ambient air are below the NAAQS, it is presumed that public health is protected. Large sources of air emissions that are required to undergo certain types of permitting under the Clean Air Act must conduct an ambient air impact analysis prior to implementation. For these types of sources, the analysis must demonstrate that the NAAQS will not be exceeded as a result of the additional source(s). Although the proposed Redevelopment Project is not subject to Clean Air Act permitting requirements, the same tools may be used to evaluate its impacts on the ambient air. The City of Chicago has requested that an air quality impact statement be submitted to demonstrate the protection of the NAAQS.

For an emission source that has not been constructed, pollutant concentrations in ambient air are predicted through the use of air dispersion models. In these circumstances, air dispersion modeling is performed to attempt to predict the impacts of the proposed source on the ambient air in the area surrounding the facility. Air dispersion models predict the concentrations of pollutants in the ambient air surrounding the Site, based on the Site's maximum emissions, for each hour of the day and year using historical local meteorological data. The pollutant concentrations predicted by the air dispersion modeling are then added to existing background concentrations (using values that have been measured over a year or more) of each pollutant. The summed results are then compared to the NAAQS. Air dispersion models are designed and rigorously tested to take into account realistic scenarios and yield conservative results when predicting ambient air quality impacts.

Air dispersion models are built using mathematical equations and algorithms that represent known atmospheric processes and incorporate empirical data. Modeling of ambient air quality impacts from the Proposed Redevelopment Project was conducted using the latest version of the regulatory dispersion model developed by the American Meteorological Society (AMS) and the EPA, the AMS/EPA Regulatory Model, known as AERMOD. The modeling analysis used a continuous five-year record of meteorological data comprised of nearest station's temperature and wind data.

1.1 Report Organization

This AQIS Report is organized into five sections: **Section 1.0** is an introduction to the report; **Section 2.0** provides a Site description and project background; **Section 3.0** presents an overview of air quality analysis methodology; **Section 4.0** summarizes the results of the air quality analysis; and **Section 5.0** includes a list of references used to prepare this Report. A list of acronyms and abbreviations is provided following the Table of Contents.

Excerpts from the architectural renderings for the proposed redevelopment project at the Site are shown in **Appendix A**. Projected passenger car, local delivery van, and heavy truck trips for each hour of the day are summarized in **Appendix B**. MOVES Model Electronic Run Files is included in **Appendix C**. Variable emission rates for each pollutant used in AERMOD mobile source input are presented in **Appendix D**. AERMOD model input information is presented in **Appendix E**. **Appendix F** contains the AERMOD model results summary. AERMOD Model Electronic Run Files are included in **Appendix G**.

2 Site Background and Project Overview

2.1 Site Description

The main building consists of a multi-level warehouse with a 253,920 square foot footprint and a maximum floor area of 594,296 square feet across two warehouse floors, two intermediary mezzanine levels, and office space. The building is being designed for maximum flexibility, as an end user is not under contract at this time. The end user will customize the building to fit the planned uses at the site, with customization options that include internal building layout, the size, type and number of tractor-trailer loading docks, and parking or non-truck loading areas on the mezzanine levels and building roof level. The site is designed to be compatible with a variety of industrial warehousing uses, including but not limited to supply chain warehousing, retail distribution centers, local delivery fulfillment centers, and parcel hubs. The development is anticipated to open in May 2024.

For the purposes of this study, a theoretical warehouse configuration was assumed in order to estimate the mobile source emissions based on the potential future traffic volumes. In this case, the assumed use is a fulfillment center with a local delivery component. In facilities of this type, bulk/unsorted cargo arrives at the Site via tractor-trailer trucks, employees sort the cargo into individual parcels, and the parcels are loaded into vehicles for local delivery. The local delivery vehicle is typically a commercial van. The final end user may install a different warehouse configuration. However, this use represents the configuration that is likely to produce the highest overall trip generation and result in the most conservative air quality analysis.

2.2 Purpose of Air Quality Modeling and Submittal of Report

Both on-Site and off-Site activities of the proposed redevelopment at the Site will increase emissions in the area surrounding the Site. Therefore, air quality modeling was performed to identify, to the extent feasible, the impact those emissions would have on ambient air quality. The City of Chicago (“City”), in accordance with the Chicago Air Quality Ordinance requirements, has requested that an air quality impact analysis be submitted to demonstrate that the NAAQS will be protected. The objective of this modeling effort is to provide an assessment of pollutant concentrations in ambient air and the resulting potential impacts on the public.

2.3 Air Quality Regulatory Framework

The Air Quality Ordinance, approved by City of Chicago Council in March 2021, regulates the construction and expansion of certain facilities that create air pollution. For the certain types of operations, the ordinance requires site plan review and approval by various departments including the Chicago Department of Public Health (CDPH). An air quality impact study, which will be reviewed by CDPH, must be included as part of the site plan submittal. The air quality impact study will model potential emissions from the business and its proposed operations using air modeling software, such as the U.S. EPA's AERMOD and EPA MOVES, to evaluate emissions from various sources.

This document presents the methodologies that were followed for the MOVES and AERMOD modeling as requested by the City, as well as the results of that modeling. The modeling methodologies presented herein were followed to assess ambient air quality impacts from the proposed redevelopment project when the Site is ready for its potential operation and has excluded an evaluation of the construction of the facility. This report has been developed following recommendations of the USEPA Guideline on Air Quality Models

(Guidelines, 40 CFR Part 51, Appendix W, January 2017) and Chicago Department of Public Health (CDPH) Air Quality Impact Evaluation Interim Guidance (CDPH, 2021).

3 Air Quality Analysis Methodology

This Section describes the air dispersion modeling methods, procedures, assumptions, and datasets that were used for the air quality analyses. The methodologies that were followed to calculate the pollutants emissions from each area source (no point sources are currently proposed) within the proposed project site as well as mobile-source emissions associated with the proposed facility and intersections are summarized below.

3.1 Stationary Equipment Emissions

Roux compiled information about proposed stationary sources of air emissions at the Site and documented the types and quantities of air contaminants expected to be generated from these sources under assumed worst-case facility operating conditions. This information was used to evaluate NO₂, PM2.5 and PM10 emissions from each point source and fugitive source within the proposed project at the Site.

3.1.1 Combustion Sources

For purposes of this air quality analysis, it assumed that the proposed on-Site stationary combustion sources consist of sources related to typical building support functions such as steam or heat generation, fire suppression support, or emergency power generation. Subsequent information provided by the project's mechanical, electrical, and plumbing engineer indicates that at this stage of the project the only combustion sources planned are four natural gas-fired 2,600,000 British thermal unit (Btu)-per-hour space heaters. The proposed fire pump is electric, as well as numerous other ancillary space heaters. Specifically, there are two 20,000 cubic foot per minute (cfm) recirculating makeup air units (15 horsepower [hp] motors, 460 kilovolt [kv]/3 phase [ph]) proposed to be ceiling mounted on Warehouse Level 1 and two 20,000 cfm recirculating makeup air units (15 hp motors, 460 kv/3ph) proposed to be roof mounted on Warehouse Level 2. It was conservatively assumed that all operating units run 24 hours per day for 365 days per year resulting in a total of 8,760 hours of operation per year for each unit. Emissions were estimated using USEPA Compilation of Air Pollutant Emissions Factors (AP-42) for natural gas combustion from Chapter 1.4. The average gross heating value of natural gas is assumed to be approximately 1,020 British thermal units per standard cubic foot (Btu/scf).

It should be noted that all equipment will be roof mounted, but those units serving the warehouse level 1 will have duct work into the space. The calculated emissions rates of each pollutant from four space heaters are summarized in **Table 1**.

Table 1: Calculated Emissions Rates of Each Pollutant from Four Space Heaters

Pollutant	Emission Rate Level 1 (two units)	Emission Rate Level 2 (two units)	Unit
NO ₂	0.0642	0.0642	gr/sec
PM10	0.0049	0.0049	gr/sec
PM2.5	0.0049	0.0049	gr/sec

Notes:

Emission factors from AP-42, Chapter 1.4
Each unit is rated at 2.6 MMBtu/hr heat input
MMBtu/hr - million British thermal units per hour
gr/sec - grams per second

3.1.2 Fugitive Dust

Atmospheric dust arises from the mechanical disturbance of granular material exposed to the air. Dust generated from these open sources is termed "fugitive" because it is not discharged to the atmosphere in a confined flow stream. Common sources of fugitive dust include unpaved roads, agricultural tilling operations, aggregate storage piles, and heavy construction operations. For this Site it is assumed that impacts from fugitive dusts are transient as they relate to construction activities only. Therefore, the air quality impact analysis is conducted for post-development conditions only and no fugitive dust emissions sources are modeled.

3.2 Mobile Sources Emissions

The offsite portion of the study estimated mobile-source emissions of PM2.5, PM10 and NO₂, associated with the proposed facility and intersections, which was identified in a completed Traffic Impact Study, prepared by V3 Companies on April 22, 2021, and updated on June 10, 2021 (V3, 2021). Off-site emissions estimates were modeled using EPA's Motor Vehicle Emission Simulator (MOVES) emission modeling system.

MOVES Version 3.0.2 at a project scale was used for project-level conformity analysis where link—level analysis was required. A link is a segment of road or an “off-network” location where a similar type of vehicle activity occurs. This project scale analysis required user-specified data at the link level for activity and fleet inputs that describe a particular transportation project. The Inventory calculation type was selected where mass of pollutants within a region (i.e., on-road and off-network links) and time span (i.e., specified hour of one season of a particular year) was utilized.

3.2.1 Traffic Data Preparation

Traffic data was obtained from Traffic Impact Study, prepared by V3 Companies on April 22, 2021, and updated on June 10, 2021 (V3, 2021) for the calendar years 2021 (actual observations) and 2024 (projections). The Traffic Impact Study evaluated the potential traffic impacts of a proposed warehouse development in the southwest quadrant of Division Street & Elston Avenue in Chicago, Illinois. Currently, the building is being designed for maximum flexibility, as an end user is not under contract at this time. The end user will customize the building to fit the planned uses at the site, with customization options that include internal building layout, the size, type and number of tractor-trailer loading docks, and parking or non-truck loading areas on the mezzanine levels and building roof level. The site is designed to be compatible with a variety of industrial warehousing uses, including but not limited to supply chain warehousing, retail distribution centers, local delivery fulfillment centers, and parcel hubs.

The proposed project is a speculative development, therefore specific, tenant-driven trip generation data is not available. The Traffic Impact Study conservatively assumed a theoretical fulfillment center use with a local delivery component. In facilities of this type, bulk/unsorted cargo arrives at the site via tractor-trailer trucks, employees sort the cargo into individual parcels, and the parcels are loaded into vehicles for local delivery. The local delivery vehicle is typically a commercial van. According to the Traffic Impact Study, this use represented the configuration that is likely to produce the highest overall trip generation and resulted in the most conservative analysis.

Baseline volumes are estimated based on the traffic volumes presented in the Morton Salt Redevelopment Traffic Impact Study prepared by Sam Schwartz and dated August 14, 2020 (Sam Schwartz, 2020) and

was referenced in the V3 Traffic Impact Study. Roux relied on V3 traffic Impact Study only and did not review the Morton Salt Redevelopment Traffic Impact Study prepared by Sam Schwartz. Volumes are adjusted to existing year 2021 and horizon year 2024 (one year after building opening) using CMAP growth rates, current supplemental traffic counts, and historical 24-hour traffic counts. Project trip generation considered three separate trip types: passenger car, truck, and local delivery vehicles. Since the final end user of the site is not known at this time, the passenger car and truck estimates were based on the methodology for general warehouse uses presented in the Institute of Transportation Engineers Trip Generation Manual, 10th Edition. A custom trip generation rate was presented for the local delivery vehicle trips, which was based on the site characteristics and operational data from similar sites of this type.

The on-Site vehicle activities are, in part, based on the architectural renderings for the proposed redevelopment project at the Site shown in **Appendix A**. The number of each vehicle population on-Site was estimated based on the number of loading gates for heavy trucks and local delivery vans as well as proposed parking spots for both passenger cars and delivery vans. Multiple parking layouts at each parking level are proposed for the parking spots. For the analysis here, it was assumed that a 50%-50% passenger car – commercial van ratio was used for site's parking capacity estimation.

Total number of gates are as follows:

- Commercial Vans: 9 gates on 2nd and 4th levels (i.e., 18 gates total)
- Heavy trucks with long trailers: 29 gates on 1st and 3rd levels (i.e., 58 gates total)

Total number of parking spots are as follows:

- Passenger cars: 1808 (i.e., 50% = 904)
- Commercial Vans: 874 (i.e., 50% = 455)

Therefore, the total vehicle capacity of the Site was estimated to be 1,417 (i.e., 904 passenger cars, 455 commercial vans, and 58 heavy trucks). This estimated number matches very well with the 1415 total vehicle population estimated in the Table 1 of Traffic Impact Study. Traffic Impact Study used ITE Trip Generation Manual for a Land Use Code 150 – Warehouse for an 80% passenger – 20% truck configuration and used custom rates for local delivery vans based on site configuration and existing data from sites with similar Local Delivery option. **Appendix B** summarizes the projected passenger car, local delivery van, and heavy truck trips for each hour of the day.

3.2.2 MOVES Model Setup

According to USEPA's guidance on *Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas* (USEPA, 2015); "Hot-spot analyses for the annual PM2.5 NAAQS should include 16 unique MOVES runs (i.e., four runs for different time periods for each of four calendar quarters)". The results from these 16 runs will represent the emissions from traffic increase as a result of the Site redevelopment predicted by Traffic Impact Study for the analysis year (i.e., 2024).

For the analysis year 2024, MOVES was run four times a day (i.e., A.M. peak hour, P.M. peak hour, midday peak hour, and off-peak overnight) for four different months (i.e., January, April, July, and October) to

account for different climate conditions throughout the year. Each month represents a season, where January represents winter (Dec, Jan, Feb), April represents spring (Mar, Apr, May), July represents summer (Jun, Jul, Aug), and October represents fall (Sep, Oct, Nov). For every link, a set of 16 emission factors in units of grams per hour were developed for use in the dispersion model analysis. They include:

- Morning peak (AM) emissions based on traffic data and meteorology occurring between 5 a.m. and 9 a.m. (emissions from one hour/one MOVES run represent all four hours)
- Midday (MD) emissions based on data from 9 a.m. to 2 p.m.
- Evening peak (PM) emissions based on data from 2 p.m. to 10 p.m.
- Overnight (ON) emissions based on data from 10 p.m. to 5 a.m. Overnight hour was assumed to be approximately 25% of AM peak hour based on Appendix C of the Traffic Impact Study (V3, 2021).

Emission results for each of these 4 hours were applied to the other hours of the day to cover the full day. The outputs of 16 MOVES runs resulted in total of 96 emission rates (i.e., 24 hours and 4 seasons) that were exported into AERMOD model.

MOVES model setup was conducted in two stages:

- 1) MOVES RunSpec was created by entering the range of parameters in MOVES and is loaded or generated through the MOVES graphical user interface (GUI). The RunSpec file contains the following MOVES run information of the project:
 - **Description:** short description and purpose of the project being modeled added.
 - **Scale:** defines the level of analysis; *Project* level was selected.
 - **Time Spans:** years, months, days, and hours. Year 2024 was selected.
 - Year: 2024
 - Months: January (Winter), April (Spring), July (Summer), and October (Fall)
 - Days: Weekday
 - Hours: 7am to 7:59am (AM Peak Hour), 10am to 10:59am (Midday), 5pm to 5:59pm (PM Peak Hour), and 12AM to 12:59AM (Overnight).
 - **Geographic Bound:** location to be modeled. Cook county IL (code 17031) was selected.
 - **Vehicle Types:** The combination of three (3) vehicle types (Passenger Car, Light Commercial Truck, and Single Unit Long-haul Truck) and all fuel types was specified.
 - **Road Types:** On-road Urban Unrestricted Access and off-network road types were selected.

- **Pollutants and Processes:** each pollutant that would be generated by one or more emission processes. NO₂, PM2.5 and PM10 were selected including all prerequisite pollutants.
- 2) A database of local-specific information was prepared through the project data manager (PDM). Each tab in the PDM window defines the data item required, which is described in **Table 2**.

Table 2: Input Data Requirements for MOVES Project Scale

PDM Data Item	Description	Value	Source
Link	Roadway link characteristics	Link length, vehicle population, average speed	Traffic Impact Study
Operating Mode Distribution	The vehicle operating mode distribution specifies the amount of time spent by vehicle fleet in different operating modes.	Not used for on-road links. Assumed equal operating mode distribution.	Assumed
Link Source Type Fraction	Vehicle fleet composition for each roadway link	60% Passenger Cars, 30% Local Delivery Vehicles, and 10% Single Unit Long-haul Truck	Traffic Impact Study
Off-Network Link	Off-network links used to estimate vehicle start emissions	10% start fraction 0% idling fraction 0% parking fraction	Assumed
Source Type Age Distribution	Vehicle age distribution	MOVES default values for 2021	MOVES database
Meteorology	Temperature and humidity	MOVES default values	MOVES database
Fuel Supply	Fuel-supply parameters and associated market share for each fuel	MOVES default values	MOVES database
I/M Program	Inspection–maintenance program parameters for nonattainment areas	MOVES default values	MOVES database
Link Drive Schedule	Speed/time trace second-by-second and percentage grade for roadway links	Not Used	-

Two types of links were evaluated in MOVES: 43 on-road running links that was used to describe driving activities on roads surrounding the Site that will be impacted by the proposed development; and one off-network link that was used to describe areas of start and hoteling activities (e.g., parking and loading/unloading areas on-Site). **Figure 2** shows the links locations in MOVES with Existing Lane Configuration (No-Build) – **Figure 2A**, and with Proposed Lane Configuration (Build) – **Figure 2B**.

MOVES electronic run files for all 16 runs are included in **Appendix C**. Summary of MOVES link input parameters are shown in **Table 3**.

3.2.3 MOVES Model Results

For links representing the roads potentially impacted by the redevelopment project and the off-network link representing on-Site emissions from mobile sources (i.e., vehicle parking, starting, and hoteling), the MOVES3.0.2 post-processing script was used to generate link-specific emission rates for NO₂, total PM10, and total PM2.5.

Sixteen MOVES runs resulted in variable emission rates for 4 times per day (i.e., AM, MD, PM, and ON) and 4 seasons (i.e., winter, spring, summer, and autumn) at each link. Structured Query Language (SQL) scripts on on-road output database were run using HeidiSQL version 11.0.0.5919 to export NO₂, PM2.5, and PM10 emission rates in grams per hour for each MIVES link into Excel spreadsheet to be imported into AERMOD. Emission rates were then used for AERMOD dispersion modeling, which is further described in following Section. **Table 4** summarizes the MOVES output emission rates for PM2.5 (Table 4A), PM10 (Table 4B) and NO₂ (Table 4C).

3.3 Dispersion Modeling

Dispersion modeling was conducted using BREEZE AERMOD Version 10.0 that includes the latest version of the USEPA-approved AERMOD dispersion modeling system (AERMOD Version 21112). AERMOD is a computer-based mathematical dispersion model that can predict ambient concentrations of pollutants that result from releases to the atmosphere. AERMOD uses hour-by-hour meteorological data to predict the patterns of ambient concentrations of pollutants over time.

AERMOD's three models and required model inputs, are described as follows:

- AERMET: calculates boundary layer parameters for input to AERMOD
 - Model inputs: wind speed; wind direction; cloud cover; ambient temperature; morning sounding; albedo; surface roughness; Bowen ratio; and
 - Model outputs for AERMOD: wind speed; wind direction; ambient temperature; lateral turbulence; vertical turbulence; sensible heat flux; friction velocity; Monin-Obukhov Length.
- AERMAP: calculates terrain heights and receptor grids for input to AERMOD
 - Model inputs: DEM data [x,y,z]; design of receptor grid (pol., cart., disc.); and
 - Model outputs for AERMOD: [x,y,z] and hill height scale for each receptor.
- AERMOD: calculates temporally averaged air pollution concentrations at receptor locations for comparison to the NAAQS
 - Model inputs: source parameters, boundary layer meteorology (from AERMET), and receptor data (from AERMAP); and
 - Model outputs: temporally averaged air pollutant concentrations

3.3.1 Regional and Local Topography

The landforms of Cook County are mostly the result of depositional glacial processes. The significant topographic features include broad almost level plains that were once lake beds; concentric, subparallel ridges formed as moraines marking the outer margins of continental glaciers, and gentle, elongate sandy spits, bars and beach ridges formed along the shore of glacial Lake Chicago and other ancestors of present-day Lake Michigan.

The highest point in Cook County is at the northwest corner and is almost 1000 feet above sea level. For most of the county the topography slopes gradually toward Lake Michigan to the east and is dissected by north-south trending stream-cut valleys. Most of the central and southeastern portion of Cook County is composed of a low flat plain. **Figure 3** shows the local topography of the area surrounding the Site.

3.3.2 Regional Climatology

The Site is located within Cook County, Illinois. The county receives, on average, 34 inches of precipitation annually and approximately 178 days with measurable precipitation. The average wind speed is 9 miles per hour. Long-term climatological data is summarized in **Table 5** below for the Cook County region calculated over a period of 10 years from 2011 through 2020. While regionally representative, the climatology data can be assumed to differ slightly from that at the Site.

Table 5: Cook County Monthly Averages of Climatology Parameters

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temp. (F)	Hi 29° Lo 20°	Hi 31° Lo 21°	Hi 44° Lo 33°	Hi 54° Lo 41°	Hi 65° Lo 52°	Hi 75° Lo 62°	Hi 80° Lo 68°	Hi 80° Lo 67°	Hi 74° Lo 61°	Hi 60° Lo 48°	Hi 47° Lo 37°	Hi 35° Lo 27°
Avg. Wind Speed (mph)	11	10	10	10	9	8	7	7	8	10	10	10
Avg. Precip. (in)	1.6	1.6	2.1	3.2	4.2	4.9	4.4	3.8	2.6	2.7	1.5	1.6
Average Humidity (%)	82	83	74	74	76	77	77	75	72	71	73	79
Avg. Cloud Cover (%)	60	58	48	47	39	30	25	24	27	39	42	55
Barometric Pressure (in)	30.1	30.1	30.1	30.0	30.0	29.9	30.0	30.0	30.0	30.0	30.1	30.1
Average Dry Days	12	10	13	10	8	8	8	9	12	13	15	14
Avg. Precip. Days	10	8	14	17	20	19	19	18	15	16	11	11
Average Snow Days	14	13	6	2	0	0	0	0	0	0	5	11
Average Fog Days	1	1	0	1	2	2	1	1	0	1	0	1
Average UV Index	1	2	2	3	5	6	6	5	4	2	2	1
Avg. Hours of Sun	201	190	261	253	295	319	344	351	321	287	268	225

Notes:

Averages are based on historical weather data from the past 10 years (2011-2020).

Source: <https://www.weatherwx.com/hazardoutlook/il/cook+county.html>

3.3.3 Meteorological Data and Land Use

AERMOD requires an input of hourly meteorological data to estimate pollutant concentrations in ambient air resulting from modeled source emissions. The USEPA's Guideline on Air Quality Models states that "5 years of NWS meteorological data or at least 1 year of site-specific data is required" for an air quality modeling analysis (40 CFR 51, Appendix W, 8.3.1.2 b.). The use of 5 years of meteorological data allows for an assessment of conditions that occur at both the Site location as well as at the surface meteorological data collection location, even if they occur at differing times. AERMOD requires upper air and surface characteristic data. Twice-daily upper air sounding data were obtained from the upper air monitoring station most geographically proximate to the surface station site. The nearest upper air data collection site, relative to the Project Area, is the Chicago Midway airport (KMDW Station ID 72534).

The 5 years (i.e., 2016 through 2020) of AERMOD-ready data processed using data from Chicago Midway airport and the 50 km X 50 km terrain data centered over 1241 West Division Street, Chicago, Illinois were obtained from a third-party vendor. The 18081 version of the AERMOD terrain processor, AERMAP, was used to develop the receptor elevations and hill heights. A 1/3 arc-sec (10-m) resolution United States Geological Survey (USGS) National Elevation Dataset (NED) file was used for this processing.

The base elevation of the KMDW station is 188.4 meters above mean sea level (AMSL). This station is the nearest and most representative surface station to the Site. The data as purchased have undergone the quality assurance process required by USEPA to identify and fill in missing data. The surface and upper air meteorological data were prepared for use in AERMOD using the AERMET meteorological data processor.

AERMOD requires parameters for determining boundary layer conditions, which include opaque sky cover (or total sky cover). Per USEPA's AERMET guidance, the concurrent sky cover data for surface meteorological data is to be obtained from the nearest NWS site. The Midway Airport, Illinois NWS site surface measurement data includes sky cover data, which was used for the analysis. Surface parameters (albedo, Bowen ratio and surface roughness) were determined using the latest USEPA AERSURFACE processor and surface data from the National Land Cover Database for the state of Illinois based on the North American Datum 83.

The latest version of BREEZE AERMET (Version 9.0.0.4) that incorporated the latest AERMOD meteorological processor (USEPA AERMET 21112) was used to generate AERMOD-input-ready hourly meteorological files for this analysis. The meteorological data output from AERMET is summarized in the windrose shown in **Figure 4**. Winds most commonly originate from the south-southwest and westerly directions in general, though winds originate from all directions for at least some percentage of time. The average wind speed over the 43,848 available measurements from 1/1/2016 through 12/31/2020 timeframe was 4.9 mph (treating calm conditions as 0) with a maximum wind speed of 16.4 mph.

3.3.4 Pollutants and Averaging Periods

Modeling was conducted for emissions of NO₂, PM10 and PM2.5 from on-Site stationary and mobile sources as well as off-Site on-road vehicle activities. The air quality analysis includes dispersion modeling for the pollutants and averaging periods presented below and were used for compliance demonstration (i.e., comparison with NAAQS).

- NO₂ – Annual and 1-hour averaging period

- PM10 –24-hour averaging period
- PM2.5 - Annual and 24-hour averaging period.

Particulate matter deposition using particle size data was not considered for any modeling runs, resulting in no removal of mass from the plume, and hence likely more conservative predictions of impacts to ambient air. USEPA recommended default value of ambient equilibrium NO₂/NO_x ratio (i.e., the maximum allowed ratio) was set to 0.9.

3.3.5 Emission Sources and Rates

AERMOD has the capability of modeling various types of stationary and mobile sources that include area sources, volume sources, and line sources as line volume sources. Area sources are appropriate to model ground level releases with no plume rise such as stationary sources. Line sources (e.g., EPA Line with a specified line width) include mobile on-road sources. In BREEZE AERMOD, Polygon Area sources were used for modeling of the emissions from on-Site stationary sources (i.e., space heaters) and off-network mobile sources as well as roadways that were not straight line. Roadways with straight lines were modeled using EPA Line with an assumed width of 6 meters. The recommended plume width is calculated as the vehicle width plus six meters for a single lane road, which is the approach used for this modeling evaluation.

Both volume sources and area sources could be used to represent roads according to CDPH Air Quality Impact Evaluation Interim Guidance (CDPH, 2021). EPA Line sources are similar to Polygon Area sources and the emission rates for both of these source types are assumed to be uniformly distributed over the source area and are simply the equipment emission rate in mass per time divided by the total source area. The following release heights above ground level (AGL) for each source type were assumed:

- Stationary Sources: The combustion sources (i.e., 4 space heaters) were modeled as area sources with the horizontal dimensions (length and width) of the Warehouse building and release heights equal to 12 meters AGL for the two heaters on Level 1 ceiling and 24 meters AGL for the heaters on Level 2 roof, based on the assumption that the average diffuse release will be spread uniformly over the entire area of the Warehouse footprint.
- On-Road Mobile Sources: An average release height of 1 m AGL was assumed for all MOVES links where passenger cars, commercial vans and heavy trucks contribute to the emissions.
- Off-Network Mobile Sources: The parking garages were modeled as area sources with the horizontal dimensions of the parking garages and a release height equal to half the design height of the garage (i.e., equal to 12 meters AGL), based on the assumption that the average release height will be half the height of the parking garages.

Other physical source parameters (such as source release height, initial vertical dispersion coefficient, etc.) besides emission rates were based on guidance provided in USEPA Publication EPA-420-B-15-084, Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (USEPA 2015). **Table 6** provides the modeling design parameters of each source of emissions.

An approximately 2 km x 2 km AERMOD modeling area was selected as the AERMOD modeling domain. AERMOD Modeling Domain and Source Layout is shown in **Figure 5**.

The emissions sources were input to AERMOD with 1 gram/(second.m²) emission rates that were multiplied by the emission rate calculated for each link to produce 24-hour emission profiles by hour of day for each season based on MOVES output. The 24-hour emission profiles, based on the four daily time periods assessed in the MOVES runs, were simulated in AERMOD using four season and 24-hourly emission scalars for each source. Variable Emission Generator Methodology below, details the methodology for using temporally varying emission rates for each source of emissions. AERMOD model input information is presented in **Appendix E**.

Table 6: AERMOD Modeling Design Parameters

Modeling Parameters	Stationary Source(s)	Mobile Source(s)
AERMOD Executable	EPA Version 21112	
Regulatory Templates	Concentration only, with no depletion options	
Receptor Heights (AGL)	Flagpole receptors at 1.8 m (assumed average breathing height)	
Meteorology Options	Merged 5-year (1/1/2016 through 12/31/2020) surface and upper air data	
Output Options	Receptor, day, and maximum tables, Contour plots, Summary reports and Post files	
Source Type	Polygon Area	EPA Line and Polygon Area ¹
Emission Rates	NO2: 6.09E-06 gr/sec.m ² PM10: 4.63E-07 gr/sec.m ² PM2.5: 4.63E-07 gr/sec.m ²	Variable ²
Release Height	12 m and 24 m	1 m and 12 m
Initial Vertical Dimension	0	0

Notes:

1 Bending links were modeled as polygon areas. Straight links were modeled as EPA Lines with specified 6 meters width

2 See section 3.3.5.1 for detail on variable emission rates generation methodology

3.3.5.1 Variable Emission Generator Methodology

To create an air dispersion modeling analysis that uses temporally varying emission rates for each source of emissions, variable emissions keywords were used in the Source pathway of the AERMOD input files. A Microsoft Excel workbook was used to generate the appropriate input data for each AERMOD run.

List of Steps for Variable Emission File

1. Each MOVES output file was added to a separate tab of an Excel workbook (3 pollutants = 3 tabs of output data).

2. In each of the summary tabs, 16 rows were created for each period of the day (i.e., AM, midday, PM, and overnight) and four seasons (i.e., winter, spring, summer and autumn). 44 columns of MOVES output represent the 44 links in MOVES model. Cells under these columns reference the corresponding MOVES output to produce emission rates in grams per second (g/s) for each linkID for each period of the day.
3. To create a “four-season – 24-hour” profile of emission factors in AERMOD, a separate tab was created for each pollutant to convert the emission rates of gr/sec to gr/sec/m² based on each links area according to AERMOD source property. 96 rows were created for each MOVES linkID. Each cell in these columns references the emission factor corresponding to the appropriate link and period of the day from the columns described in step 2. The time of day was divided as follows:
 - a. Hours 12am–5am: Overnight
 - b. Hours 5am–9am: AM peak
 - c. Hours 9am–2pm: Midday
 - d. Hours 2pm–10pm: PM peak
 - e. Hours 10pm–12am: Overnight
4. The resulting column for each linkID was copied from the workbook and pasted into an AERMOD input file for each source that had emission rates of 1 g/s assigned to each source, since the Area source emission rates of g/s were already divided by the area of the source to produce values in units of grams per second per square meter (g/sec-m²).

Appendix D shows the 96 variable emission rates used as AERMOD mobile source input (i.e., 4 seasons and 24 hours) for each link (44 MOVES links) and each pollutant (i.e., NO₂, PM10 and PM2.5).

3.3.6 Receptors

A series of non-uniform receptor points centered on the on-Site stationary and off-Site mobile sources were used for this analysis to estimate ambient pollutant concentrations resulting from the potential emissions. According to USEPA's guidance on Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas (USEPA, 2015):

“Receptor spacing in the vicinity of the source should be of sufficient resolution to capture the concentration gradients around the locations of maximum modeled concentrations. The majority of emissions from a highway or transit project will occur within several meters of the ground, and concentrations are likely to be greatest in proximity of near-ground sources. As such, receptors should be placed with finer spacing (e.g., 25 meters) closer to a near-ground source, and with wider spacing (e.g., 100 meters) farther from such a source. While prevailing wind directions may influence where maximum impacts are likely to occur, receptors should also be placed in all directions surrounding a project.”

The AERMOD receptor network is presented in **Figure 6**. The grid consists of approximately 950 receptors each assumed to be at breathing-level (1.8 meters high). The following receptor spacing and extents around each facility, in accordance with USEPA's guidance, were used for this analysis:

- Fenceline receptors were also included in the model and located every 25 meters along the virtual property boundary for a total of 55 receptors.
- 25-meter (m) spacing along the perimeter of the Site and along roads with mobile sources out to approximately 50 meters from sources;
- 50-m spacing out to approximately 200 meters from sources;
- 100-m spacing between 1 km from sources; and
- Additional receptors of interest, as appropriate, on the boundaries or within the 1-km radius from Site.

3.3.7 Building Downwash

The incorporation of building-induced downwash effects into this analysis was not required since there are no point sources proposed. It was assumed that all stationary and mobile sources were diffuse area sources and therefore no building definition and downwash analysis were required.

3.3.8 Design Values

To evaluate the potential impacts of emissions from the proposed Site redevelopment on the public, the dispersion modeling evaluation must consider the existing background concentrations of pollutants in the area where impacts are being evaluated. The background concentration of a given pollutant is added to the modeled impact from the proposed Site redevelopment, and the result is compared to the NAAQs. The NAAQS are allowable concentration limits applied at the public access boundary.

Only criteria air pollutant impacts were assessed as part of the modeling analysis. The criteria air pollutants which are particulate matter less than or equal in diameter to ten microns (PM10), particulate matter less than or equal in diameter to 2.5 microns (PM2.5), and nitrogen dioxide (NO2). The background values used for this analysis are tabulated below in **Table 7**.

Table 7: Design Values used for the Modeling Analysis

Pollutant	Averaging Period	Design Value	Unit
NO2	1-Hour	57	ppb
	Annual	15.89	ppb
PM10	24-Hour	82	µg/m ³
PM2.5	24-Hour	21.6	µg/m ³
	Annual	9.1	µg/m ³

Notes:

- NO2 data from Cook County Trailer (1820 South 51st Avenue) monitor (AQS ID 17-031-4002)
- PM 10 data from Village Hall (50th Street and Glencoe) monitor (AQS ID 17-031-1016)
- PM 2.5 data from Springfield Pump Station (1745 North Springfield Avenue) monitor (AQS ID 17-031-0057)

The background values we obtained from the latest available Illinois Air Quality Report (2019 reporting year). Monitoring stations were selected based on proximity to the Site (i.e., the station closest to the Site with the appropriate criteria pollutant monitoring capability).

3.3.9 Post-Development Impact

3.3.9 Post-Development Impacts were calculated by adding modeled receptor values to the design values. The resulting Post-Development Impact concentration was then compared to the NAAQS. The Post-Development Impact concentrations for each pollutant and averaging period are summarized in **Table 8** compared with NAAQS.

- **1-hour NO₂.** The 1-hour NO₂ Post-Development Impact was calculated by first identifying the receptor with the highest 5-year 1-hour average concentration at each receptor across 5 years of meteorological data (as done by AERMOD). The receptor with the highest modeled concentration for a 24-hour period was then added to the design value and compared to the NAAQS.
- **Annual NO₂.** The annual NO₂ Post-Development Impact was calculated directly by AERMOD by the model averaging the 5 years of annual averages for each receptor and reporting the highest receptor. The receptor with the highest modeled 5-year average concentration was identified, and this value was then added to the design value and compared to the NAAQS.
- **24-hour PM10.** The 24-hour PM10 Post-Development Impact was calculated by first identifying the receptor with the highest 5-year 24-hour average concentration at each receptor across 5 years of meteorological data (as done by AERMOD). The receptor with the highest modeled concentration for a 24-hour period was then added to the design value and compared to the NAAQS.
- **24-hour PM2.5.** The 24-hour PM2.5 Post-Development Impact was calculated by identifying the receptor with the highest 5-year 24-hour average concentration (as done by AERMOD). The receptor with the highest modeled concentration for a 24-hour period was then added to the design value and compared to the NAAQS.
- **Annual PM2.5.** The annual PM2.5 Post-Development Impact was calculated directly by AERMOD by the model averaging the 5 years of annual averages for each receptor and reporting the highest receptor. The receptor with the highest modeled 5-year average concentration was identified, and this value was then added to the design value and compared to the NAAQS.

AERMOD output concentrations were reported in $\mu\text{g}/\text{m}^3$ units for all pollutants. However, NO₂ concentrations must be converted to the units of parts per billion (ppb) in order to be added to design values and compared with NAAQS values. The general conversion equation is

$$\mu\text{g}/\text{m}^3 = (\text{ppb}) * (12.187) * (M) / (273.15 + ^\circ\text{C})$$

where M is the molecular weight of the gaseous pollutant (i.e., 46 gr/mol for NO₂). Assuming an ambient pressure of 1 atmosphere and a temperature of 25 degrees Celsius, the conversion factor for NO₂ concentrations is $C(\text{ppb}) = C(\mu\text{g}/\text{m}^3) / 1.88$

4 Results and Discussion

AERMOD was setup to allow the evaluation of stationary sources on-Site and vehicle activity-related emissions for the maximum 1-hour average and the maximum annual-average NO₂ concentrations, the maximum 24-hour average and the maximum annual-average PM10 concentrations, and 24-hour average and maximum annual-average PM2.5 concentrations. The modeling results are presented in the following sections.

4.1 Modeling Results

The air dispersion modeling results and corresponding figures that graphically summarize the modeling results are described below. **Table 8** summarizes the modeled value and Post-Development Impact concentrations for each pollutant and averaging period compared with NAAQS. As Shown in **Table 8**, predicted concentrations as a result of Site operation are very small compared to the background concentrations and the pollutant concentrations do not exceed National Ambient Air Quality Standards (NAAQSS). Among the pollutants and averaging periods, highest 1-hour average NO₂ concentration had the highest increase (20 ppb), but well below the NAAQS. **Appendix F** contains the AERMOD model results summary.

Figure 7 through **Figure 11** show the contour maps of predicted highest pollutant concentrations for each averaging period. The location and value of the highest predicted concentration is shown in each figure. In terms of the location of highest predicted concentration increase, as expected, highest increase in the pollutant concentrations would occur along the perimeter of the Site. However, these higher predicted impacts rapidly drop off within a few meters further away from the Site perimeter. AERMOD Model Electronic Run Files are included in **Appendix G**.

Table 8 Post-Development Impact for each Pollutant and Averaging Period compared with NAAQS

Pollutant	Averaging Period	Modeled Value	Design Values	Post-Development Impact	NAAQS	Unit
NO ₂	1-Hour	23.0	57	80.0	100	ppb
	Annual	0.9	15.9	16.8	53	ppb
PM10	24-Hour	0.8	82	92	150	µg/m ³
PM2.5	24-Hour	0.4	21.6	23	35	µg/m ³
	Annual	0.1	9.1	9.2	12	µg/m ³

Notes:

- Modeled values were derived from AERMOD and are reported to one decimal place beyond the NAAQS value.
- Background concentrations are reported to one decimal place beyond the NAAQS value.
- Design values and Post-Development Impact values are rounded to nearest 0.1 µg/m³ for PM10 and PM2.5 or ppb for NO₂ (USEPA, 2015)

4.1.1 1-hour NO₂

Figure 7 shows the highest 1-hour average NO₂ concentration predictions resulted from the proposed redevelopment project (i.e., modeled receptor value). The 1-hour NO₂ Post-Development Impact was

calculated by adding the modeled receptor value to the design value (USEPA, 2015). The resulting 1-hour NO₂ Post-Development Impact concentration was then rounded to the nearest 0.1 µg/m³ (USEPA, 2015). 1-hour NO₂ Post-Development Impact of 80.0 ppb is less than the 1-hour NO₂ NAAQS (100 ppb). This demonstrates that the proposed redevelopment project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the NO₂ NAAQS. Therefore, would not cause an exceedance of the 1-hour NO₂ NAAQS.

4.1.2 Annual NO₂

Figure 8 shows the highest annual average NO₂ concentration predictions resulted from the proposed redevelopment project (i.e., modeled receptor value). The annual NO₂ Post-Development Impact was calculated by adding the modeled receptor value to the design value (USEPA, 2015). The resulting annual NO₂ Post-Development Impact concentration was then rounded to the nearest 0.1 µg/m³ (USEPA, 2015). The annual NO₂ Post-Development Impact of 16.8 ppb is less than the annual NO₂ NAAQS (53 ppb). This demonstrates that the proposed redevelopment project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the NO₂ NAAQS. Therefore, the proposed redevelopment project would not cause an exceedance of the NO₂ NAAQS.

4.1.3 24-hour PM10

Figure 9 shows the highest 24-hour average PM10 concentration predictions resulted from the proposed redevelopment project (i.e., modeled receptor value). The 24-hour PM10 Post-Development Impact was calculated by adding the modeled receptor value to the design value (USEPA, 2015). The resulting 24-hour PM10 Post-Development Impact concentration was then rounded to the nearest 10 micrograms per cubic meter (µg/m³) (USEPA, 2015). The 24-hour PM10 Post-Development Impact of 92 µg/m³ are less than the 24-hour PM10 NAAQS (150 µg/m³). This demonstrates that the proposed redevelopment project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the PM10 NAAQS. Therefore, the proposed redevelopment project would not cause an exceedance of the PM10 NAAQS.

4.1.4 24-hour PM2.5

Figure 10 shows the highest 24-hour average PM2.5 concentration predictions resulted from the proposed redevelopment project (i.e., modeled receptor value). The 24-hour PM2.5 Post-Development Impact was calculated by adding the modeled receptor value to the design value (USEPA, 2015). The resulting 24-hour PM2.5 Post-Development Impact concentration was then rounded to the nearest 1 µg/m³ (USEPA, 2015). The 24-hour PM2.5 Post-Development Impact of 23 µg/m³ are less than the 24-hour PM2.5 NAAQS (35 µg/m³). This demonstrates that the proposed redevelopment project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the 24-hour PM2.5 NAAQS. Therefore, the proposed redevelopment project would not cause an exceedance of the 24-hour PM2.5 NAAQS.

4.1.5 Annual PM2.5

Figure 11 shows the highest annual average PM2.5 concentration predictions resulted from the proposed redevelopment project (i.e., modeled receptor value). The annual PM2.5 Post-Development Impact was calculated by adding the modeled receptor value to the design value (USEPA, 2015). The resulting annual PM2.5 Post-Development Impact concentration was then rounded to the nearest 0.1 µg/m³ (USEPA, 2015). The annual PM2.5 Post-Development Impact of 9.2 µg/m³ is less than the annual PM2.5 NAAQS (12

$\mu\text{g}/\text{m}^3$). This demonstrates that the proposed redevelopment project would not contribute to any new local violations, increase the frequency or severity of any existing violation, or delay timely attainment of the annual PM2.5 NAAQS. Therefore, the proposed redevelopment project would not cause an exceedance of the annual PM2.5 NAAQS.

4.2 Interpretation of Model Predictions

The model predictions indicate the potential impacts from stationary and mobile sources related to the activities after the proposed redevelopment project is completed and the Site is operational will be negligible and therefore will not lead to localized exceedances of the NAAQS for NO₂, PM10 and PM2.5. The estimates may reflect conservative assumptions regarding vehicle utilization and facility-related activities.

Chicago, like many urban areas, has many emission sources of air pollutants that contribute to significant background concentrations of NO₂, PM10 and PM2.5. Data from the 2019 Illinois Air Quality Report (IEPA, 2019) indicate background concentrations are close to the levels of the National Ambient Air Quality Standards (NAAQS).

Predicted concentrations generally decrease rapidly with distance from the Site boundary, a characteristic of the dispersion of emissions from a ground-level source. The AP42-based value for the space heaters is based on assumption that the heater units run 24 hours per day for 365 days a year and may greatly overestimate actual emissions. The heaters may not run all the time throughout the entire day or certain seasons (e.g., summer).

The highest 1-hour average NO₂ concentration reach as high as 80 ppb (below the NAAQS of 100 ppb). The highest annual average NO₂ concentration is of the order of 16.8 ppb (below the allowable NAAQS of 53 ppb). The highest 24-hour average PM10 concentration of 92 $\mu\text{g}/\text{m}^3$ is also below the 150 $\mu\text{g}/\text{m}^3$ NAAQS. The highest 24-hour average PM2.5 concentration reach as high as 23 $\mu\text{g}/\text{m}^3$ (below the NAAQS of 35 $\mu\text{g}/\text{m}^3$). The highest annual average PM2.5 concentration is of the order of 9 $\mu\text{g}/\text{m}^3$ (below the allowable NAAQS of 12 $\mu\text{g}/\text{m}^3$).

5 References

CDPH, 2021. Air Quality Impact Evaluation Interim Guidance, prepared by Chicago Department of Public Health (CDPH), September 2021

IEPA, 2019. Illinois Annual Air Quality Report, Air Quality Index 2019, prepared by State of Illinois Environmental Protection Agency, Bureau of Air.

USEPA, 2015. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas, Transportation and Climate Division, Office of Transportation and Air Quality, U.S. Environmental Protection Agency, EPA-420-B-15-084, November 2015

V3, 2021. Traffic Impact Study - LPC Warehouse, prepared by V3 Companies for 1241 W DIVISION STREET REDEVELOPMENT at DIVISION STREET & ELSTON AVENUE CHICAGO, ILLINOIS. V3 Project No. 20779. April 22, 2021, and updated on June 10, 2021

Sam Schwartz, 2020. Traffic Impact Study - Morton Salt Redevelopment – Chicago, Illinois, prepared by Sam Schwartz for Blue Star Properties. August 14, 2020.

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TABLES

3. Summary of MOVES Link Input Parameters
4.
 - A. Summary of MOVES Link Output Emission Rates for PM2.5
 - B. Summary of MOVES Link Output Emission Rates for PM10
 - C. Summary of MOVES Link Output Emission Rates for NO2

Table 3
Summary of MOVES Link Input Parameters
Proposed Redevelopment Project
1241 W Division Street - Chicago, Illinois

LinkID	Link Description	Road Type	RoadTypeID	Link Length (meters)	Link Length (miles)	Link Volume (AM) # vehicle/hr	Link Volume (MD) # vehicle/hr	Link Volume (PM) # vehicle/hr	Link Volume (ON) # vehicle/hr	Average Speed (mph)	Link Average Grade
1	Division St, West Direction, Left of Signal	5	Urban Unrestricted	180	0.112	18	69	53	5	30	0
2	Division St, East Direction, Left of Stop Sign	5	Urban Unrestricted	85	0.053	57	48	23	14	30	0
3	Prop Drwy, Inbound	5	Urban Unrestricted	120	0.075	29	25	13	7	10	0
4	Prop Drwy, Outbound	5	Urban Unrestricted	120	0.075	4	24	10	1	10	0
5	Division St, East Direction, Between Stop Sign and Signal	5	Urban Unrestricted	100	0.062	32	42	20	8	30	0
6	Elston Ave, South Direction, North of Signal	5	Urban Unrestricted	430	0.267	11	8	4	3	25	0
7	Elston Ave, North Direction, North of Signal	5	Urban Unrestricted	430	0.267	4	24	11	1	25	0
8	Division St, West Direction, Between Elston Ave and N Branch St	5	Urban Unrestricted	230	0.143	2	2	1	1	30	0
9	Division St, East Direction, Between Elston Ave and N Branch St	5	Urban Unrestricted	230	0.143	1	6	3	0	30	0
10	N Branch St, South Direction, South of Division St	5	Urban Unrestricted	400	0.249	0	0	0	0	25	0
11	N Branch St, North Direction, South of Division St	5	Urban Unrestricted	400	0.249	0	0	0	0	25	0
12	Division St, East Direction, East of N Branch St (to N Halsted St)	5	Urban Unrestricted	600	0.373	1	6	3	0	30	0
13	Division St, West Direction, East of N Branch St (to N Halsted St)	5	Urban Unrestricted	600	0.373	2	2	1	1	30	0
14	N Branch St, South Direction, North of Division St	5	Urban Unrestricted	425	0.264	0	0	0	0	25	0
15	N Branch St, North Direction, North of Division St	5	Urban Unrestricted	425	0.264	0	0	0	0	25	0
16	Elston Ave, South Direction, Between Signal and North Prop Drwy	5	Urban Unrestricted	160	0.099	41	33	15	10	25	0
17	Elston Ave, North Direction, Between Signal and North Prop Drwy	5	Urban Unrestricted	160	0.099	19	80	57	5	25	0
18	North Prop Drwy Inbound	5	Urban Unrestricted	120	0.075	21	17	8	5	10	0
19	North Prop Drwy Outbound	5	Urban Unrestricted	120	0.075	12	92	31	3	10	0
20	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	5	Urban Unrestricted	50	0.031	26	46	13	7	25	0
21	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	5	Urban Unrestricted	50	0.031	11	18	37	3	25	0
22	South Prop Drwy Inbound	5	Urban Unrestricted	50	0.031	2	4	7	1	10	0
23	South Prop Drwy Outbound	5	Urban Unrestricted	50	0.031	2	4	7	1	10	0
24	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	5	Urban Unrestricted	130	0.081	26	46	13	7	25	0
25	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	5	Urban Unrestricted	130	0.081	11	14	25	3	25	0
26	Cortez St, West Direction	5	Urban Unrestricted	150	0.093	30	25	11	8	10	0
27	Cortez St, East Direction	5	Urban Unrestricted	150	0.093	9	13	29	2	10	0
28	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	5	Urban Unrestricted	90	0.056	4	29	10	1	25	0
29	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	5	Urban Unrestricted	90	0.056	10	9	4	3	25	0
30	Augusta Blvd, East Direction, West of Elston Ave	5	Urban Unrestricted	60	0.037	0	0	0	0	25	0
31	Augusta Blvd, West Direction, West of Elston Ave	5	Urban Unrestricted	60	0.037	0	0	0	0	25	0
32	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	5	Urban Unrestricted	320	0.199	4	29	10	1	25	0
33	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	5	Urban Unrestricted	320	0.199	10	9	4	3	25	0
34	Augusta Blvd, East Direction, East of Elston Ave	5	Urban Unrestricted	300	0.186	0	0	0	0	25	0
35	Augusta Blvd, West Direction, East of Elston Ave	5	Urban Unrestricted	300	0.186	0	0	0	0	25	0
36	I-90/I-94 East Bound, South Direction, North of Division St	5	Urban Unrestricted	900	0.559	23	19	10	6	55	0
37	I-90/I-94 East Bound, South Direction, South of Division St	5	Urban Unrestricted	900	0.559	6	25	21	2	55	0
38	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	5	Urban Unrestricted	500	0.311	4	24	10	1	30	0
39	Division St, East Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	5	Urban Unrestricted	500	0.311	10	9	4	3	30	0
40	Division St, West Direction, Between I-90/I-94 East and West Bounds	5	Urban Unrestricted	65	0.040	10	49	31	3	30	0
41	Division St, East Direction, Between I-90/I-94 East and West Bounds	5	Urban Unrestricted	65	0.040	33	28	14	8	30	0
42	I-90/I-94 East Bound, North Direction, North of Division St	5	Urban Unrestricted	850	0.528	8	25	22	2	55	0
43	I-90/I-94 East Bound, North Direction, South of Division St	5	Urban Unrestricted	850	0.528	24	20	9	6	55	0
44	Site Parking	1	Off-Network	0	0.000	38	124	102	26	0	0

Notes:

Road Type: 1 - Off-Network, 5: Urban Unrestricted

Link Volume: Values are calculated based on traffic volumes in each link for year 2024 (Build) minus year 2020 (No-Build) from Traffic Impact Study

Link Volume: AM - Morning Peak Hour, MD - Midday Peak Hour, PM - Afternoon Peak Hour, ON - Overnight

Link Average Grade: 0 - assumed the link slope to be flat

Table 4A
Summary of MOVES Link Output Emission Rates for PM2.5
Proposed Redevelopment Project
1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
1	0.058813214	0.225450943	0.173172196	0.016337001	0.05872019	0.225094382	0.172898269	0.01631116	0.058798292	0.225393795	0.173128277	0.016332858	0.05872019	0.225094382	0.172898269	0.01631116
2	0.087947481	0.074061035	0.035487599	0.021601135	0.087808369	0.073943887	0.03543146	0.021566975	0.087925174	0.074042249	0.035478595	0.021595658	0.087808369	0.073943887	0.03543146	0.021566975
3	0.135304434	0.116641721	0.060653694	0.032659756	0.13515903	0.116516378	0.06058852	0.032624651	0.135281115	0.116621631	0.060643239	0.032654127	0.13515903	0.116516378	0.06058852	0.032624651
4	0.018662685	0.11197624	0.046656795	0.004665679	0.01864263	0.111855909	0.046606658	0.004660666	0.01865947	0.111956947	0.046648744	0.004664875	0.01864263	0.111855909	0.046606658	0.004660666
5	0.058087096	0.076239385	0.03630446	0.014521768	0.057995211	0.076118797	0.036247043	0.014498798	0.058072355	0.076220054	0.036295248	0.014518085	0.057995211	0.076118797	0.036247043	0.014498798
6	0.096369537	0.070086947	0.035043477	0.02628261	0.096226465	0.069982892	0.034991442	0.026243589	0.096346593	0.070070258	0.035035139	0.02627635	0.096226465	0.069982892	0.034991442	0.026243589
7	0.035043477	0.210260753	0.096369537	0.008760866	0.034991442	0.209948588	0.096226465	0.00874786	0.035035139	0.210210698	0.096346593	0.008758782	0.034991442	0.209948588	0.096226465	0.00874786
8	0.008350023	0.008350023	0.004175006	0.004175006	0.008336815	0.008336815	0.004168403	0.004168403	0.008347906	0.008347906	0.004173948	0.004173948	0.008336815	0.008336815	0.004168403	0.004168403
9	0.004175006	0.025050012	0.012525036	0	0.004168403	0.025010386	0.012505225	0	0.004173948	0.025043658	0.01252186	0	0.004168403	0.025010386	0.012505225	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0.010891324	0.06534806	0.032673983	0	0.010874098	0.065244705	0.032622297	0	0.010888563	0.065331493	0.0326657	0	0.010874098	0.065244705	0.032622297	0
13	0.021782655	0.021782655	0.010891324	0.010891324	0.021748192	0.021748192	0.010874098	0.010874098	0.021777125	0.021777125	0.010888563	0.010888563	0.021748192	0.021748192	0.010874098	0.010874098
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0.133654189	0.107575317	0.048897881	0.032598593	0.133455756	0.107415617	0.04882527	0.032550202	0.133622367	0.107549719	0.048886238	0.032590831	0.133455756	0.107415617	0.04882527	0.032550202
17	0.061937314	0.260788613	0.185811884	0.016299289	0.061845366	0.260401342	0.185536013	0.01627509	0.061922573	0.260726472	0.185767641	0.016295408	0.061845366	0.260401342	0.185536013	0.01627509
18	0.097979149	0.079316417	0.037325422	0.023328404	0.097873852	0.079231197	0.037285308	0.023030336	0.097962269	0.07930276	0.037318997	0.023324384	0.097873852	0.079231197	0.037285308	0.023303336
19	0.055988025	0.429241326	0.144635585	0.01399701	0.055927873	0.42878004	0.144480416	0.013981969	0.055978377	0.429167404	0.144610926	0.013994598	0.055927873	0.42878004	0.144480416	0.013981969
20	0.026486363	0.046860468	0.013243164	0.007130944	0.026447037	0.046790891	0.013223503	0.007120356	0.026480055	0.046849307	0.013240012	0.007129246	0.026447037	0.046790891	0.013223503	0.007120356
21	0.011205757	0.018336704	0.037692096	0.003056122	0.01118912	0.01830948	0.037636132	0.003051584	0.011203089	0.018332339	0.037683126	0.003055394	0.01118912	0.01830948	0.037636132	0.003051584
22	0.003888064	0.007776113	0.01360821	0.00194403	0.003883885	0.007767756	0.013593587	0.001941941	0.003887393	0.007774772	0.013605865	0.001943695	0.003883885	0.007767756	0.013593587	0.001941941
23	0.003888064	0.007776113	0.01360821	0.00194403	0.003883885	0.007767756	0.013593587	0.001941941	0.003887393	0.007774772	0.013605865	0.001943695	0.003883885	0.007767756	0.013593587	0.001941941
24	0.068864449	0.121837097	0.034432238	0.01854045	0.06876222	0.121656219	0.034381117	0.018512923	0.068848063	0.121808099	0.034424042	0.018536036	0.06876222	0.121656219	0.034381117	0.018512923
25	0.029134988	0.037080857	0.066215843	0.007945897	0.029091734	0.037025808	0.066117529	0.007934101	0.029128047	0.037072029	0.066200073	0.007944006	0.029091734	0.037025808	0.066117529	0.007934101
26	0.174962648	0.145802255	0.064152988	0.046656795	0.174774642	0.14564558	0.064084035	0.046606658	0.174932508	0.145777129	0.064141928	0.046648744	0.174774642	0.14564558	0.064084035	0.046606658
27	0.052488785	0.07581718	0.169130538	0.011664172	0.052432382	0.075735709	0.168948798	0.011651638	0.052479741	0.075804116	0.169101407	0.011662163	0.052432382	0.075735709	0.168948798	0.011651638
28	0.007334682	0.053176472	0.018336704	0.00183367	0.007323794	0.053097517	0.01830948	0.001830948	0.007332937	0.05316381	0.018332339	0.001833234	0.007323794	0.053097517	0.01830948	0.001830948
29	0.018336704	0.016503023	0.007334682	0.00550101	0.01830948	0.016478521	0.007323794	0.005492843	0.018332339	0.016499094	0.007332937	0.0054997	0.01830948	0.016478521	0.007323794	0.005492843
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0.02607887	0.189071725	0.065197209	0.006519721	0.026040143	0.18879103	0.065100419	0.006510042	0.026072656	0.189026724	0.065181691	0.006518169	0.026040143	0.18879103	0.065100419	0.006510042
33	0.065197209	0.058677472	0.02607887	0.019559152	0.065100419	0.058590355	0.026040143	0.019530115	0.065181691	0.058663497	0.026072656	0.019554495	0.065100419	0.058590355	0.026040143	0.019530115
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 4A
Summary of MOVES Link Output Emission Rates for PM2.5
Proposed Redevelopment Project
1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
36	0.191133896	0.157893153	0.083101705	0.049860967	0.190730533	0.157560039	0.082926319	0.049755739	0.191069137	0.157839707	0.083073579	0.049844093	0.190730533	0.157560039	0.082926319	0.049755739
37	0.049860967	0.207754144	0.174513541	0.016620326	0.049755739	0.207315756	0.174145199	0.016585253	0.049844093	0.207683875	0.174454484	0.0166147	0.049755739	0.207315756	0.174145199	0.016585253
38	0.036304461	0.217826549	0.090761101	0.00907611	0.036247044	0.217481926	0.090617539	0.009061754	0.036295248	0.21777125	0.090738077	0.009073808	0.036247044	0.217481926	0.090617539	0.009061754
39	0.090761101	0.081685011	0.036304461	0.027228377	0.090617539	0.081555806	0.036247044	0.027185314	0.090738077	0.081664287	0.036295248	0.027221471	0.090617539	0.081555806	0.036247044	0.027185314
40	0.011798942	0.057814855	0.036576711	0.003539683	0.011780279	0.057723404	0.036518855	0.003534085	0.01179595	0.057800195	0.036567436	0.003538786	0.011780279	0.057723404	0.036518855	0.003534085
41	0.038936565	0.033036979	0.01651853	0.009439158	0.038874978	0.032984727	0.0164924	0.009424226	0.038926689	0.0330286	0.01651434	0.009436763	0.038874978	0.032984727	0.0164924	0.009424226
42	0.062787932	0.196212248	0.172666707	0.015696979	0.062655406	0.19579825	0.172302328	0.015663845	0.062766679	0.196145935	0.172608345	0.015691668	0.062655406	0.19579825	0.172302328	0.015663845
43	0.188363723	0.156969785	0.070636391	0.047090934	0.187966195	0.156638448	0.070487304	0.04699154	0.188299994	0.156916681	0.070612493	0.047075	0.187966195	0.156638448	0.070487304	0.04699154
44	0.334848124	0.864181021	0.577644189	0.202674469	0.103077429	0.22242827	0.158194942	0.071186532	0.038140745	0.11920974	0.099016343	0.029537764	0.097769928	0.20295754	0.153882608	0.062291421

Notes:
RX_YYY2024_ZZ: Run X (where X=1 to 16), Month YYY (where YYY=Jan, Apr, Jul, and Oct), and Time Period ZZ (where ZZ=AM, MD, PM, and ON)
Emission rates are in gram per hour units

Table 4B

Summary of MOVES Link Output Emission Rates for PM10

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
1	0.172861383	0.662634682	0.508980339	0.048017058	0.172756221	0.66223155	0.508670684	0.047987846	0.172844524	0.662570029	0.508930698	0.048012374	0.172756221	0.66223155	0.508670684	0.047987846
2	0.258491727	0.217677271	0.104303756	0.063489156	0.258334473	0.217544847	0.104240304	0.063450544	0.258466513	0.217656043	0.104293586	0.063482971	0.258334473	0.217544847	0.104240304	0.063450544
3	0.43393034	0.374077992	0.194520454	0.10474185	0.433765986	0.373936301	0.194446783	0.104702178	0.433903994	0.374055268	0.194508642	0.104735493	0.433765986	0.373936301	0.194446783	0.104702178
4	0.05985244	0.359114607	0.149631157	0.014963116	0.05982977	0.358978587	0.149574482	0.014957448	0.059848806	0.359092801	0.149622069	0.014962207	0.05982977	0.358978587	0.149574482	0.014957448
5	0.170727212	0.224079603	0.106704564	0.04268176	0.170623351	0.223943275	0.106639649	0.042655793	0.170710564	0.224057739	0.106694162	0.042677596	0.170623351	0.223943275	0.106639649	0.042655793
6	0.303235729	0.220535091	0.110267578	0.082700634	0.303074001	0.220417466	0.110208755	0.082656524	0.303209798	0.220516224	0.110258151	0.082693554	0.303074001	0.220417466	0.110208755	0.082656524
7	0.110267578	0.66160506	0.303235729	0.027566891	0.110208755	0.661252163	0.303074001	0.027552188	0.110258151	0.661548487	0.303209798	0.027564533	0.110208755	0.661252163	0.303074001	0.027552188
8	0.024542046	0.024542046	0.012271026	0.012271026	0.024527114	0.024527114	0.012263561	0.012263561	0.024539651	0.024539651	0.012269829	0.012269829	0.024527114	0.024527114	0.012263561	0.012263561
9	0.012271026	0.073626135	0.036813065	0	0.012263561	0.073581343	0.036790669	0	0.012269829	0.073618957	0.036809474	0	0.012263561	0.073581343	0.036790669	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0.032011354	0.192068078	0.096034112	0	0.03199188	0.191951242	0.09597569	0	0.032008232	0.192049352	0.09602474	0	0.03199188	0.191951242	0.09597569	0
13	0.064022707	0.064022707	0.032011354	0.032011354	0.063983756	0.063983756	0.03199188	0.03199188	0.064016463	0.064016463	0.032008232	0.032008232	0.063983756	0.063983756	0.03199188	0.03199188
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0.420555725	0.338496208	0.153861711	0.102574684	0.420331401	0.338315664	0.153779647	0.102519975	0.420519755	0.338467251	0.153848555	0.102565913	0.420331401	0.338315664	0.153779647	0.102519975
17	0.194891545	0.820595214	0.584674797	0.051287204	0.194787601	0.820157522	0.584362946	0.05125985	0.194874877	0.82052499	0.584624793	0.051282818	0.194787601	0.820157522	0.584362946	0.05125985
18	0.314225136	0.254373016	0.119705103	0.074815576	0.314106113	0.254276659	0.119659761	0.074787237	0.314206057	0.254357561	0.119697836	0.074811032	0.314106113	0.254276659	0.119659761	0.074787237
19	0.179557428	1.376606734	0.463856576	0.044889342	0.17948942	1.37608531	0.463680881	0.044872339	0.179546518	1.376523236	0.463828404	0.044886615	0.17948942	1.37608531	0.463680881	0.044872339
20	0.083341749	0.147450734	0.041670912	0.022438166	0.083297299	0.147372083	0.041648687	0.022426197	0.083334621	0.147438119	0.041667349	0.022436246	0.083297299	0.147372083	0.041648687	0.022426197
21	0.035259946	0.057698181	0.118601764	0.009616351	0.035241114	0.057667406	0.118538497	0.009611222	0.035256931	0.057693245	0.118591622	0.009615528	0.035241114	0.057667406	0.118538497	0.009611222
22	0.012469256	0.024938514	0.043642461	0.00623463	0.012464532	0.024929067	0.043625931	0.006232268	0.012468498	0.024936999	0.043639812	0.006234251	0.012464532	0.024929067	0.043625931	0.006232268
23	0.012469256	0.024938514	0.043642461	0.00623463	0.012464532	0.024929067	0.043625931	0.006232268	0.012468498	0.024936999	0.043639812	0.006234251	0.012464532	0.024929067	0.043625931	0.006232268
24	0.216688507	0.38337238	0.108344264	0.05833924	0.21657294	0.383167902	0.108286471	0.058308124	0.216669982	0.383339588	0.108335	0.05833425	0.21657294	0.383167902	0.108286471	0.058308124
25	0.09167594	0.116678459	0.208354336	0.025002529	0.091627056	0.116616223	0.208243208	0.024989193	0.091668107	0.116668481	0.208336528	0.02500039	0.091627056	0.116616223	0.208243208	0.024989193
26	0.561116568	0.467597336	0.205742824	0.149631157	0.560904022	0.467420228	0.205664905	0.149574482	0.561082483	0.467568941	0.205730329	0.149622069	0.560904022	0.467420228	0.205664905	0.149574482
27	0.168334984	0.243150566	0.542412826	0.037407799	0.168271224	0.243058458	0.542207374	0.03739363	0.168324766	0.243135793	0.542379891	0.037405527	0.168271224	0.243058458	0.542207374	0.03739363
28	0.023079266	0.167324734	0.057698181	0.005769818	0.023066956	0.167235481	0.057667406	0.005766741	0.023077291	0.167310427	0.057693245	0.005769325	0.023066956	0.167235481	0.057667406	0.005766741
29	0.057698181	0.05192836	0.023079266	0.017309448	0.057667406	0.051900664	0.023066956	0.017300217	0.057693245	0.051912392	0.023077291	0.017307968	0.057667406	0.051900664	0.023066956	0.017300217
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0.082059522	0.594931683	0.205148916	0.020514893	0.082015753	0.594614362	0.205039484	0.02050395	0.0820252	0.594880831	0.205131361	0.020513137	0.082015753	0.594614362	0.205039484	0.02050395
33	0.205148916	0.184634086	0.082059522	0.061544682	0.205039484	0.1845356	0.082015753	0.061511852	0.205131361	0.184618285	0.0820252	0.061539416	0.205039484	0.1845356	0.082015753	0.061511852
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0.392980303	0.324636188	0.170861046	0.102516614	0.3925243	0.32425955	0.170662792	0.102397651	0.392907137	0.32457574	0.170829257	0.10249754	0.3925243	0.32425955	0.170662792	0.102397651

Table 4B

Summary of MOVES Link Output Emission Rates for PM10

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
37	0.102516614	0.427152438	0.358808251	0.034172207	0.102397651	0.426656865	0.358391831	0.034132549	0.10249754	0.427072964	0.358741483	0.034165846	0.102397651	0.426656865	0.358391831	0.034132549
38	0.106704564	0.64022707	0.266761313	0.026676132	0.106639649	0.639837559	0.266599026	0.026659903	0.106694162	0.640164627	0.266735293	0.02667353	0.106639649	0.639837559	0.266599026	0.026659903
39	0.266761313	0.240085276	0.106704564	0.080028429	0.266599026	0.239939221	0.106639649	0.079979747	0.266735293	0.240061858	0.106694162	0.080020626	0.266599026	0.239939221	0.106639649	0.079979747
40	0.034678984	0.169927014	0.107504921	0.010403682	0.034657885	0.169823648	0.107439511	0.010397353	0.034675601	0.169910447	0.107494428	0.010402667	0.034657885	0.169823648	0.107439511	0.010397353
41	0.114440708	0.097101109	0.04855059	0.027743189	0.114371091	0.097042037	0.048521054	0.02772631	0.114429549	0.097091628	0.048545854	0.027740483	0.114371091	0.097042037	0.048521054	0.02772631
42	0.129094972	0.403421814	0.355011489	0.032273745	0.128945168	0.402953681	0.354599499	0.032236293	0.129070953	0.40334677	0.354945429	0.032267736	0.128945168	0.402953681	0.354599499	0.032236293
43	0.387284789	0.322737451	0.145231884	0.096821262	0.386835336	0.322362932	0.14506335	0.096708919	0.387212762	0.322677354	0.145204848	0.096803258	0.386835336	0.322362932	0.14506335	0.096708919
44	0.378356345	0.976386664	0.652561531	0.228985873	0.116355791	0.250929904	0.178403888	0.080347927	0.042949359	0.134249266	0.11150667	0.033266829	0.110355992	0.22892115	0.173529225	0.070292589

Notes:

RX_YYYY2024_ZZ: Run X (where X=1 to 16), Month YYYY (where YY=Jan, Apr, Jul, and Oct), and Time Period ZZ (where ZZ=AM, MD, PM, and ON)

Emission rates are in gram per hour units

Table 4C

Summary of MOVES Link Output Emission Rates for NO_x

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
1	0.155482091	0.596016111	0.457809656	0.043189602	0.151096794	0.572795482	0.439686987	0.041969061	0.130172776	0.506654462	0.392727074	0.036196501	0.148873956	0.561383199	0.431919839	0.041158401
2	0.232504322	0.195792771	0.093817328	0.057106207	0.225945774	0.188164204	0.090103445	0.055492447	0.194656324	0.166437558	0.080480313	0.047859834	0.222622306	0.18441533	0.088511935	0.054420475
3	0.334650932	0.288492263	0.150016193	0.080777686	0.325935446	0.277958544	0.144447153	0.078669828	0.284869009	0.253958404	0.133754323	0.068520738	0.321279283	0.272581473	0.141969818	0.07719391
4	0.046158667	0.276951998	0.115396786	0.011539679	0.044956604	0.266840836	0.111113162	0.01123856	0.039292339	0.243800646	0.102888034	0.009788685	0.044314305	0.261679025	0.109207598	0.011027709
5	0.153563027	0.201551047	0.095976819	0.038390718	0.14923173	0.193699177	0.092177514	0.037305812	0.12856568	0.171332059	0.082332876	0.032174692	0.147036254	0.189839279	0.090549276	0.036585191
6	0.255632887	0.185914341	0.092957262	0.069717992	0.248466323	0.178708222	0.08929608	0.067759875	0.214413965	0.158736364	0.080135649	0.058500568	0.244821256	0.17515712	0.087723026	0.06645433
7	0.092957262	0.557744056	0.255632887	0.023239368	0.090351426	0.536124667	0.245564736	0.022586667	0.07796852	0.476208082	0.220372639	0.019500163	0.08902587	0.525471454	0.241238689	0.022151474
8	0.022074676	0.022074676	0.011037338	0.011037338	0.021452	0.021214603	0.010600409	0.010725431	0.018481302	0.018764969	0.00946827	0.009250216	0.021136454	0.020791951	0.010413169	0.010518245
9	0.011037338	0.066224016	0.033111196	0	0.010726022	0.063643885	0.031801254	0	0.009240661	0.056295011	0.028404852	0	0.010568236	0.062375849	0.031239494	0
10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	0.028793042	0.172757889	0.086379111	0	0.027980947	0.166027382	0.082959669	0	0.024106022	0.146856189	0.074099495	0	0.027569309	0.162719625	0.081494345	0
13	0.057586072	0.057586072	0.028793042	0.028793042	0.05596189	0.055342574	0.027653226	0.027979419	0.048212135	0.048952143	0.024699834	0.024130977	0.055138604	0.054239917	0.027164811	0.027438871
14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	0.3545348	0.285357533	0.129707802	0.086471905	0.34459604	0.274296705	0.124599188	0.084043174	0.29736821	0.243641722	0.111817156	0.072558825	0.339539902	0.268846238	0.122404251	0.082424025
17	0.164296804	0.691774787	0.492890359	0.043235952	0.15969126	0.664961035	0.473477097	0.042021585	0.137804793	0.590645897	0.424905313	0.036279363	0.157347822	0.651747976	0.465135965	0.041212061
18	0.242333496	0.196174939	0.092317363	0.057698345	0.23602228	0.189011573	0.0888905	0.056192802	0.20628449	0.172692188	0.082310291	0.048943425	0.232650124	0.185355397	0.087366117	0.055138496
19	0.138476044	1.061650533	0.357730278	0.034619011	0.134870292	1.022888334	0.344451052	0.033715651	0.117876905	0.934568295	0.318953121	0.029366012	0.132943326	1.003100732	0.338543673	0.033083073
20	0.07025842	0.124303308	0.035129254	0.01891576	0.068288875	0.119485196	0.033745642	0.018384417	0.058929732	0.106131611	0.0302838	0.015872216	0.067286985	0.117110966	0.033151176	0.018030216
21	0.029724724	0.048640492	0.099983147	0.008106737	0.028891478	0.04675053	0.09604521	0.007879051	0.024931841	0.041529749	0.086192422	0.006802389	0.028467598	0.045825997	0.09435325	0.007727248
22	0.0096164	0.019232785	0.033657387	0.004808201	0.009365968	0.01853054	0.032407993	0.004682734	0.008185894	0.016930597	0.030008983	0.004078622	0.009232146	0.018172165	0.031852231	0.004594877
23	0.0096164	0.019232785	0.033657387	0.004808201	0.009365968	0.01853054	0.032407993	0.004682734	0.008185894	0.016930597	0.030008983	0.004078622	0.009232146	0.018172165	0.031852231	0.004594877
24	0.182672069	0.32318854	0.091336025	0.049180912	0.177551218	0.310661641	0.087738667	0.04779955	0.15321684	0.275942055	0.078737972	0.04126784	0.174946112	0.30448871	0.086192996	0.046878677
25	0.07728428	0.098361762	0.17564617	0.021077519	0.075117769	0.094549169	0.168727665	0.020485538	0.064822669	0.083982438	0.1514191	0.017686194	0.074015619	0.092670424	0.165755377	0.02009085
26	0.432738418	0.360614837	0.158670804	0.115396786	0.421468552	0.347448846	0.152780897	0.112385601	0.36836507	0.317448404	0.141471248	0.09788685	0.415446806	0.340727259	0.150160842	0.110277085
27	0.129821413	0.187519332	0.41831367	0.028849227	0.126440558	0.1806736	0.402784973	0.028096447	0.110509614	0.165072843	0.372969253	0.024471714	0.12463403	0.177177874	0.395877585	0.027569243
28	0.019456167	0.141057611	0.048640492	0.004864049	0.018910774	0.135589695	0.046724657	0.004727436	0.016318951	0.120436404	0.041931468	0.004081431	0.018633324	0.132895474	0.045901564	0.004636348
29	0.048640492	0.043776369	0.019456167	0.014592159	0.047276936	0.042079535	0.018689861	0.014182268	0.040797465	0.037376772	0.016772614	0.01244298	0.046583221	0.04124343	0.018360601	0.013909057
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
32	0.069177476	0.501536697	0.172944196	0.01729442	0.067238235	0.482096592	0.16613202	0.016808692	0.05802307	0.42821767	0.149089664	0.014511785	0.066251769	0.472517457	0.16320613	0.01648476
33	0.172944196	0.155649351	0.069177476	0.051883167	0.168096107	0.149616529	0.066452885	0.050425985	0.145057406	0.132895322	0.059635776	0.043535253	0.165629915	0.146643062	0.065282242	0.049454388
34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36	0.588456309	0.486116014	0.255850641	0.153510458	0.569643273	0.465092877	0.24461712	0.148594033	0.487033212	0.412730752	0.219769463	0.126905885	0.560821887	0.455331358	0.2400656	0.145572132

Table 4C

Summary of MOVES Link Output Emission Rates for NO₂

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

LinkID	R1_Jan2024_AM	R2_Jan2024_MD	R3_Jan2024_PM	R4_Jan2024_ON	R5_Apr2024_AM	R6_Apr2024_MD	R7_Apr2024_PM	R8_Apr2024_ON	R9_Jul2024_AM	R10_Jul2024_MD	R11_Jul2024_PM	R12_Jul2024_ON	R13_Oct2024_AM	R14_Oct2024_MD	R15_Oct2024_PM	R16_Oct2024_ON
37	0.153510458	0.639626067	0.537286761	0.051170133	0.148602656	0.611963612	0.513697019	0.049531304	0.127052037	0.543066309	0.46151547	0.042301966	0.146301243	0.599120349	0.504138316	0.048524002
38	0.095976819	0.575860716	0.23994258	0.023994249	0.093269783	0.553425726	0.230443963	0.023316159	0.0803536	0.489521425	0.205832333	0.020109159	0.091897712	0.542399061	0.226373456	0.02286576
39	0.23994258	0.215948007	0.095976819	0.071982649	0.233174005	0.207535034	0.092177524	0.069948479	0.200883526	0.183570586	0.082332876	0.060327475	0.229743974	0.203399127	0.090549276	0.068597274
40	0.031192478	0.152842615	0.096696651	0.009357748	0.030312706	0.14688784	0.092868801	0.009093311	0.026114958	0.129927119	0.082950327	0.007842572	0.029866755	0.143961412	0.091228453	0.008917652
41	0.102935177	0.087338945	0.043669468	0.024953988	0.100031858	0.083936194	0.041940771	0.024248793	0.08617917	0.074244051	0.037461458	0.020913556	0.098560315	0.08226385	0.041199918	0.023780376
42	0.193309588	0.604091681	0.531601021	0.048327309	0.187129155	0.577965604	0.508261117	0.046779643	0.159991545	0.512896036	0.456631407	0.0399519	0.184231209	0.565835756	0.498804225	0.045828226
43	0.579927762	0.483273079	0.21747258	0.144981975	0.561380866	0.462372266	0.207925132	0.140338807	0.47997434	0.410316671	0.186803939	0.11985551	0.552693311	0.452668544	0.204056014	0.137484784
44	0.3366319	1.033141275	0.851037634	0.246419307	0.319129753	0.965581723	0.797362906	0.235550283	0.302866925	0.926145633	0.77202184	0.225565708	0.318225424	0.960370813	0.796048604	0.233928082

Notes:

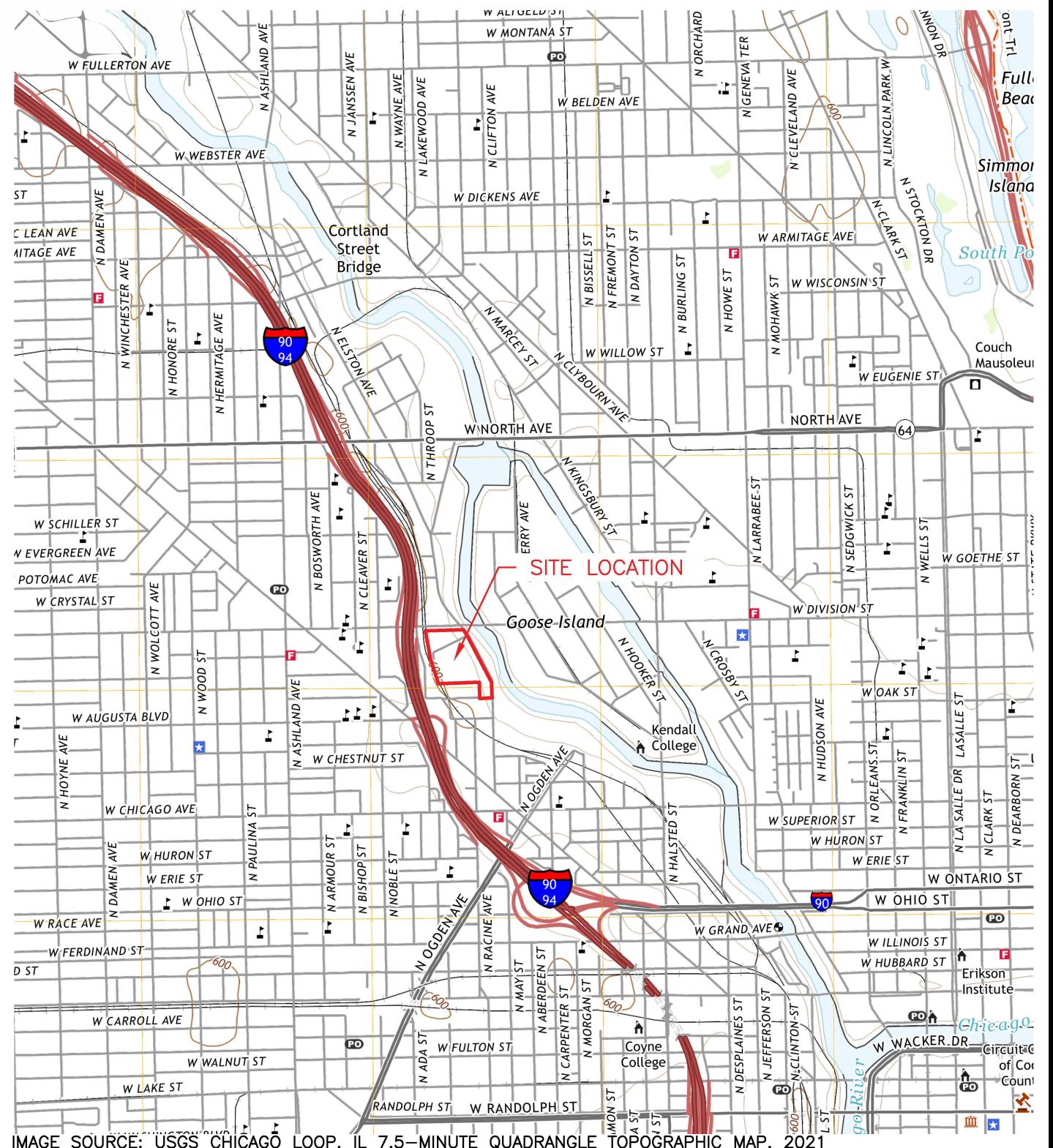
RX_YYY2024_ZZ: Run X (where X=1 to 16), Month YYY (where YY=Jan, Apr, Jul, and Oct), and Time Period ZZ (where ZZ=AM, MD, PM, and ON)

Emission rates are in gram per hour units

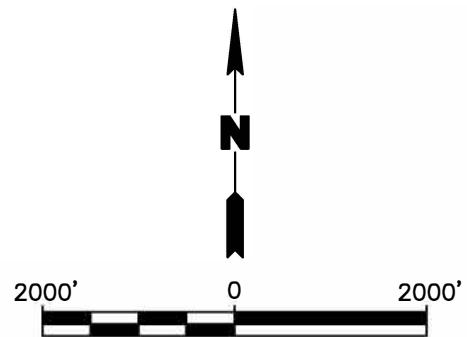
Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois

FIGURES

1. Site Location Map
2.
 - a. Location of MOVES links with Existing Lane Configuration (No-Build)
 - b. Location of MOVES links with Proposed Lane Configuration (Build)
3. Local Topography of the Area Surrounding the Site
4. Windrose for MIDWAY AIRPORT Station for the Time Period January 1, 2016 - December 31, 2020
5. AERMOD Modeling Domain and Source Layout
6. Location of AERMOD Receptor Network
7. Highest 1-hour Average NO₂ Concentration Predictions
8. Highest Annual Average NO₂ Concentration Predictions
9. Highest 24-Hour Average PM10 Concentration Predictions
10. Highest 24-Hour Average PM2.5 Concentration Predictions
11. Highest Annual Average PM2.5 Concentration Predictions



TIGERLOGISTICS PROPERTY COMPANY DIVISION C AD FIGURES.DWG



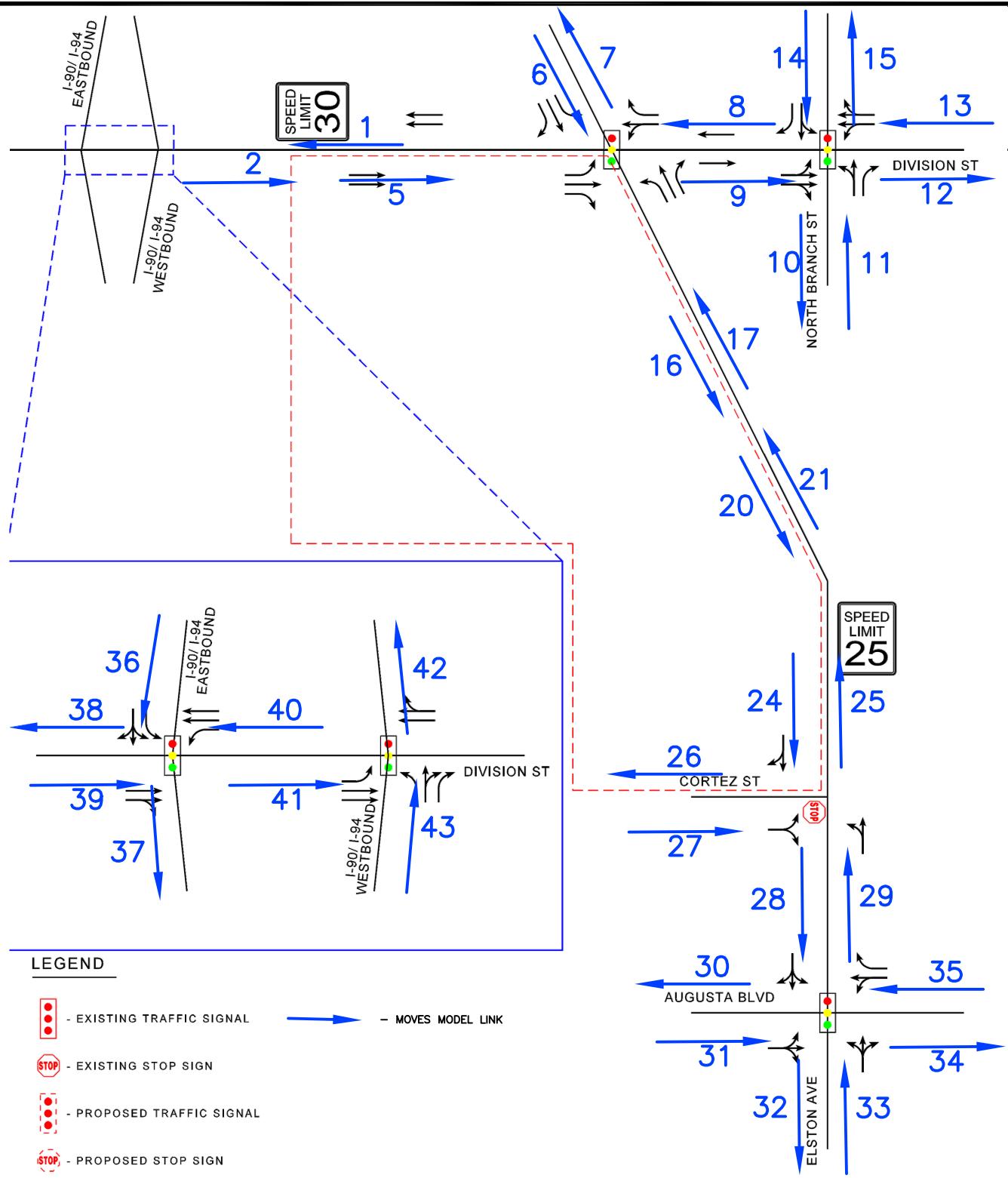
Title: Site Location Map

Prepared for: 1241 W Division Street, Chicago Illinois

LPC Acquisition Company, LLC

Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: AS SHOWN
Project Mgr: TZ	Project: 3637.0001004
File: FIGURES.DWG	FIGURE 1

ROUX



Title: **Location of MOVES Links
with Existing Lane Configuration
(No-Build)**

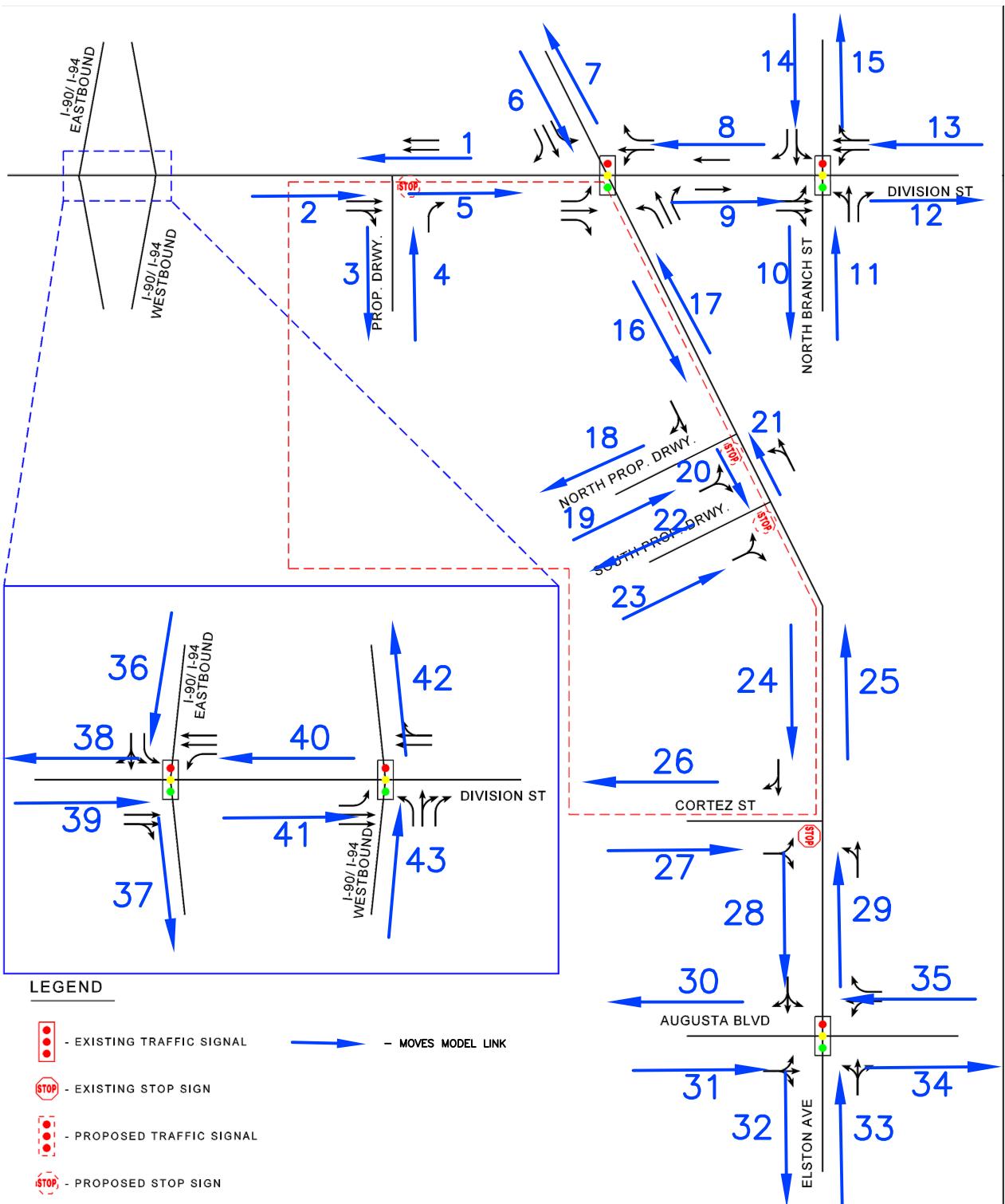
Prepared for:

LPC Acquisition Company, LLC



Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: NOT TO SCALE
Project Mgr: TZ	Project: 3637.0001I004
File: FIGURES.DWG	

FIGURE
2A



Title: **Location of MOVES Links
with Proposed Lane Configuration
(Build)**

Prepared for:

LPC Acquisition Company, LLC



Compiled by: RE Date: 10/15/2021

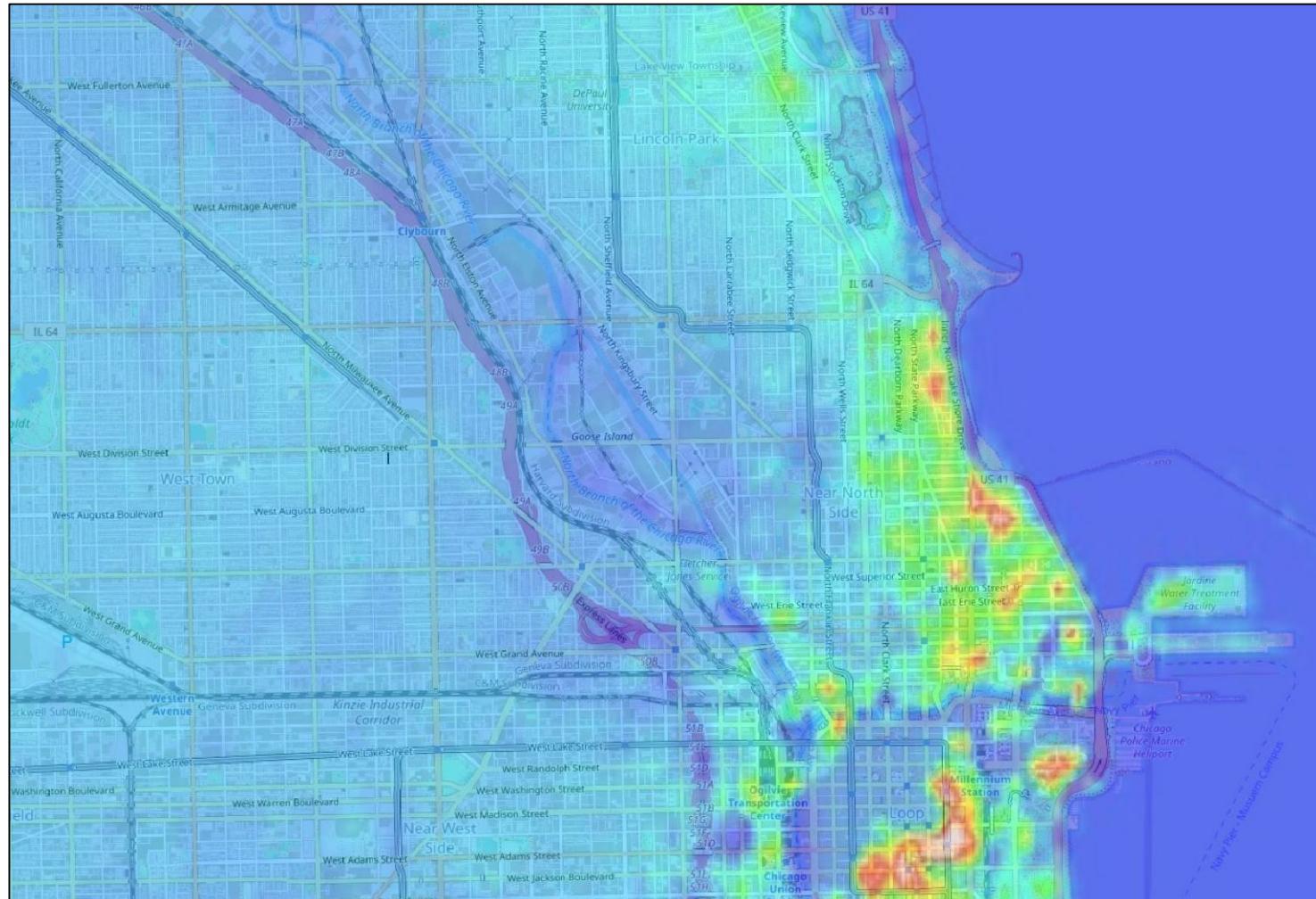
Prepared by: RE Scale: NOT TO SCALE

Project Mgr: TZ Project: 3637.0001I004

File: FIGURES.DWG

FIGURE

2B



Chicago, Cook County, Illinois, United States

Title:

Local Topography of the Area Surrounding the Site



1241 W Division Street, Chicago Illinois

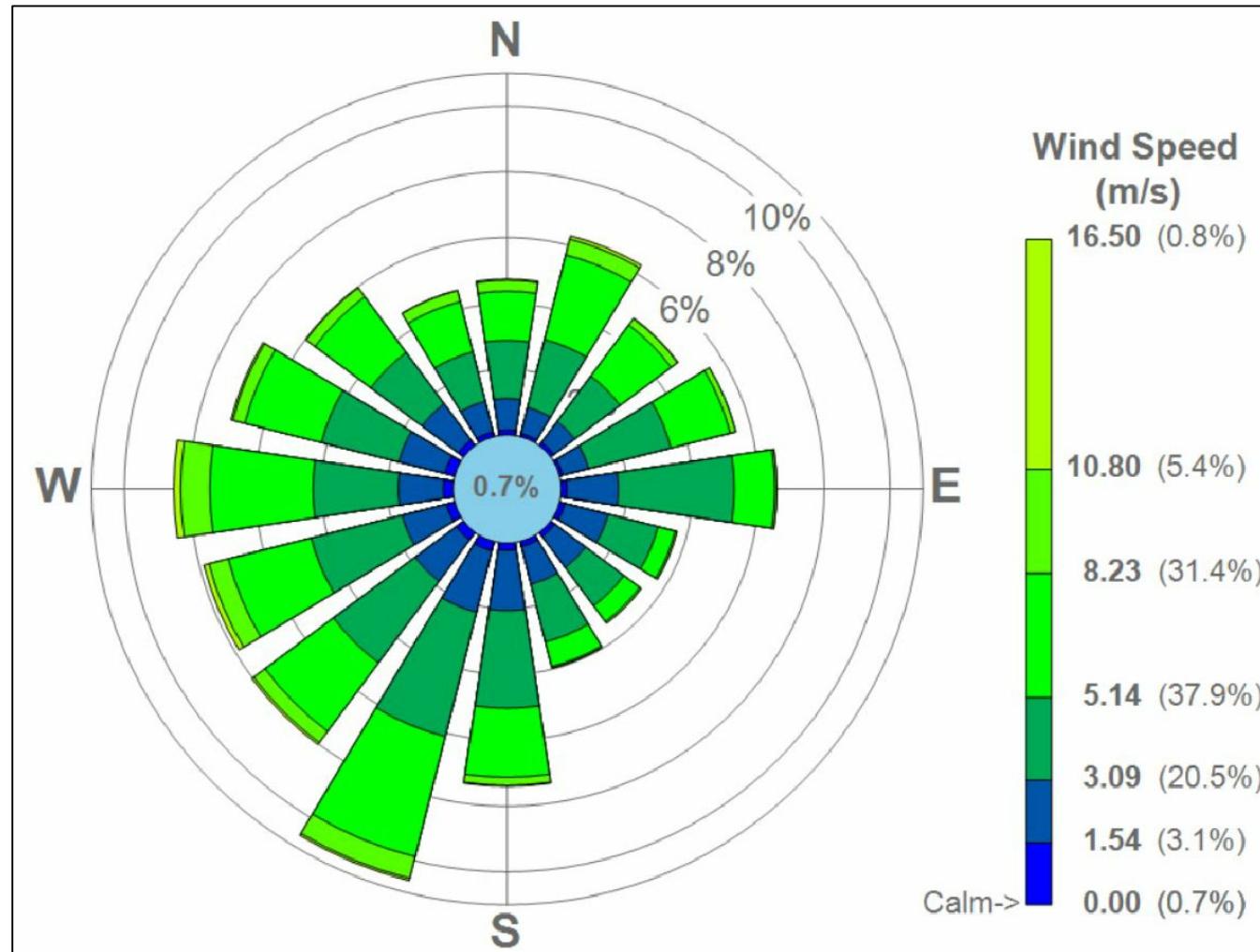
Prepared for:

LPC Acquisition Company, LLC



Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: NOT TO SCALE
Project Mgr: TZ	Project: 3637.0001I004
File: FIGURES.DWG	

FIGURE
3



Title: Windrose for Chicago Midway Airport

for the Time Period
January 1, 2016 - December 31, 2020

1241 W Division Street, Chicago Illinois		
Prepared for:		
LPC Acquisition Company, LLC		
ROUX	Compiled by: RE	Date: 10/15/2021
	Prepared by: RE	Scale: NOT TO SCALE
	Project Mgr: TZ	Project: 3637.0001I004
	File: FIGURES.DWG	



LEGEND:

- AERMOD Modeling Domain
- EPA Line Source
- Polygon Area Source



Title:

AERMOD Modeling Domain and Source Layout

1241 W Division Street, Chicago Illinois

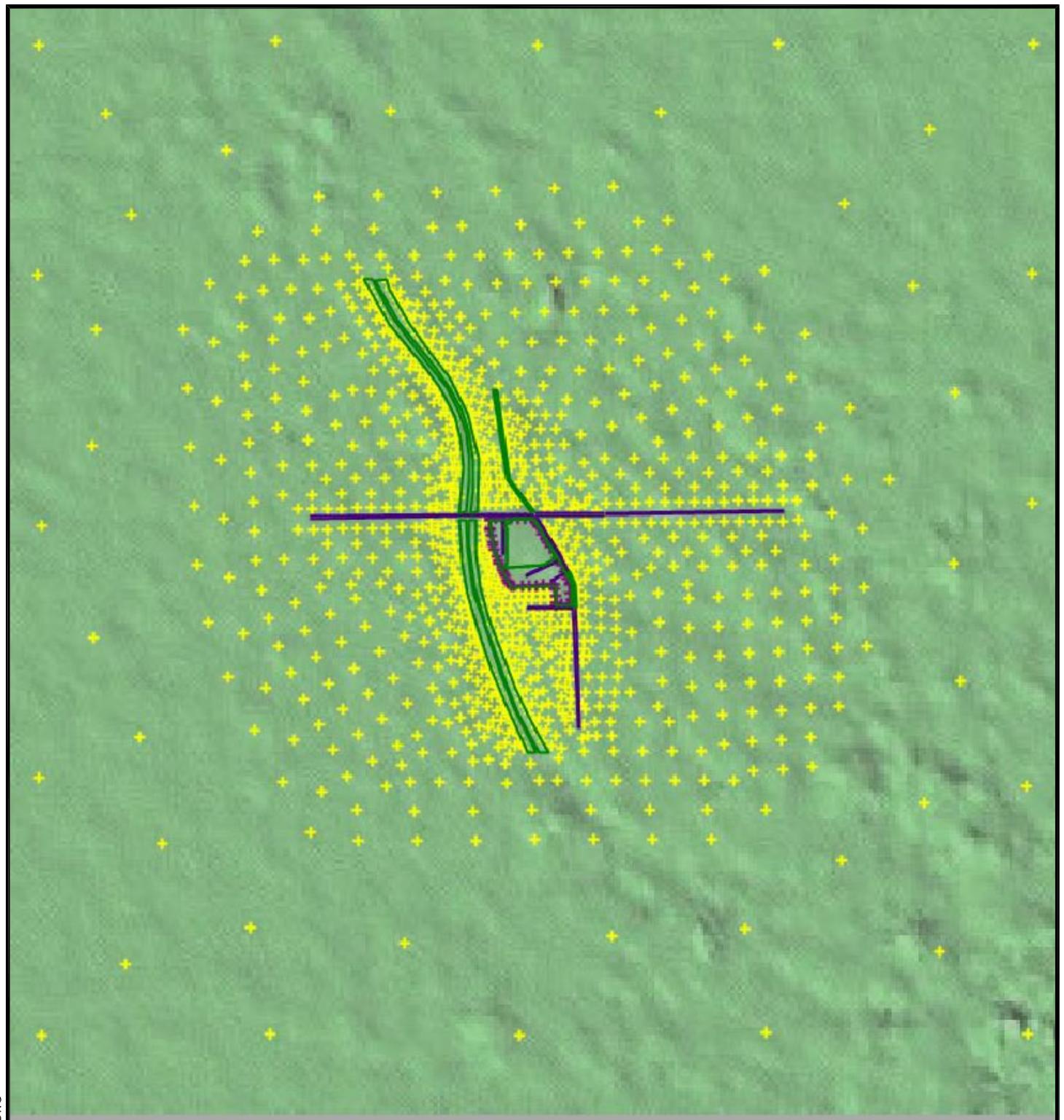
Prepared for:

LPC Acquisition Company, LLC

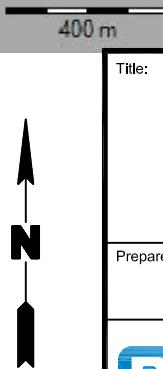
ROUX

Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: AS SHOWN
Project Mgr: TZ	Project: 3637.0001I004
File: FIGURES.DWG	

FIGURE
5



TRILOGISTICS PROPERTY COMPANY DIVISION CAD FIGURES.DWG



Title:

Location of AERMOD Receptor Network

1241 W Division Street, Chicago Illinois

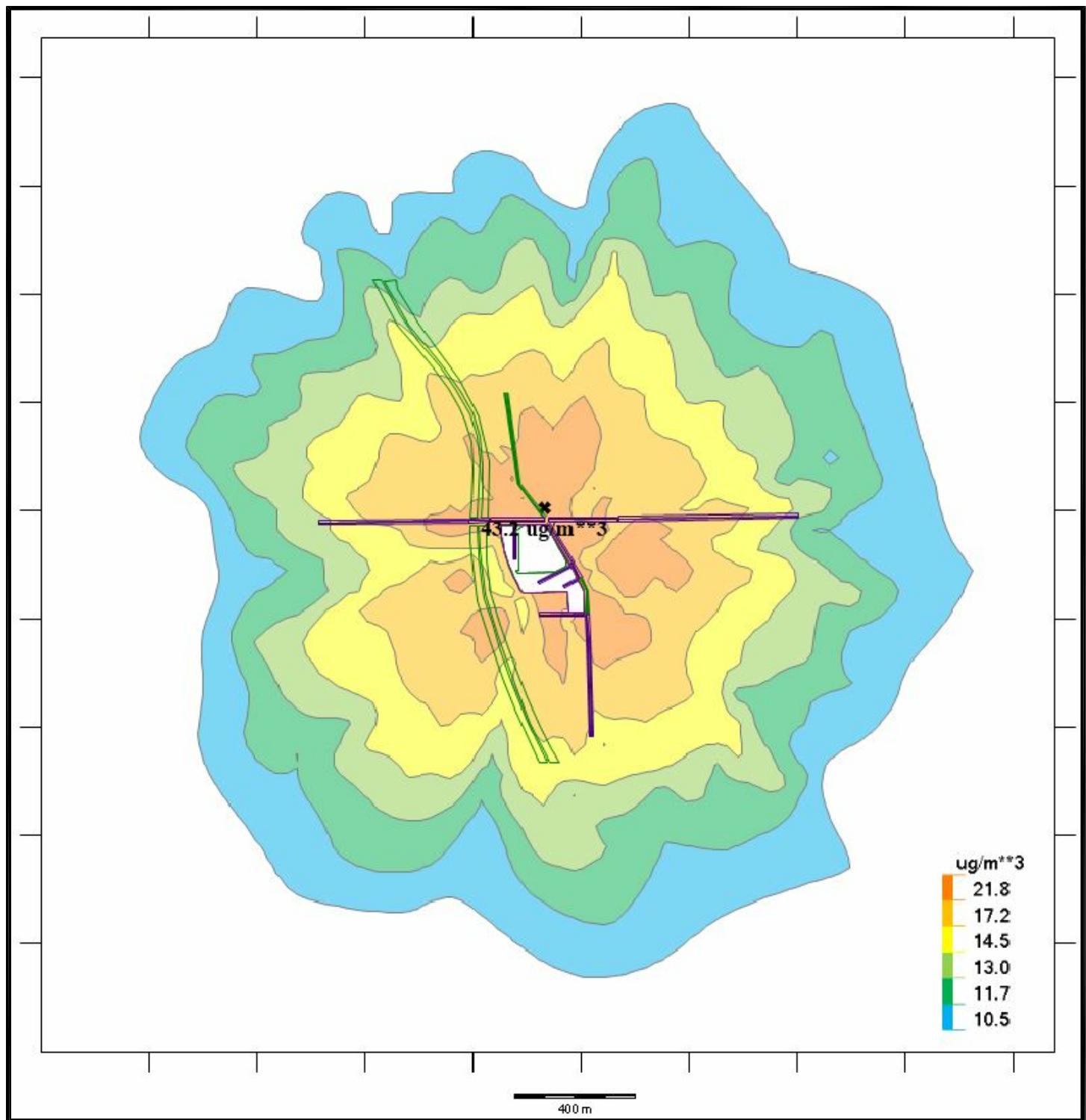
Prepared for:

LPC Acquisition Company, LLC

ROUX

Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: AS SHOWN
Project Mgr: TZ	Project: 3637.0001I004
File: FIGURES.DWG	

FIGURE
6



TRILOGISTICS PROPERTY COMPANY DIVISION CAD FIGURES.DWG

Title:

Highest 1-Hour Average NO₂ Concentration Predictions

1241 W Division Street, Chicago Illinois

Prepared for:

LPC Acquisition Company, LLC



ROUX

Compiled by: RE Date: 10/15/2021

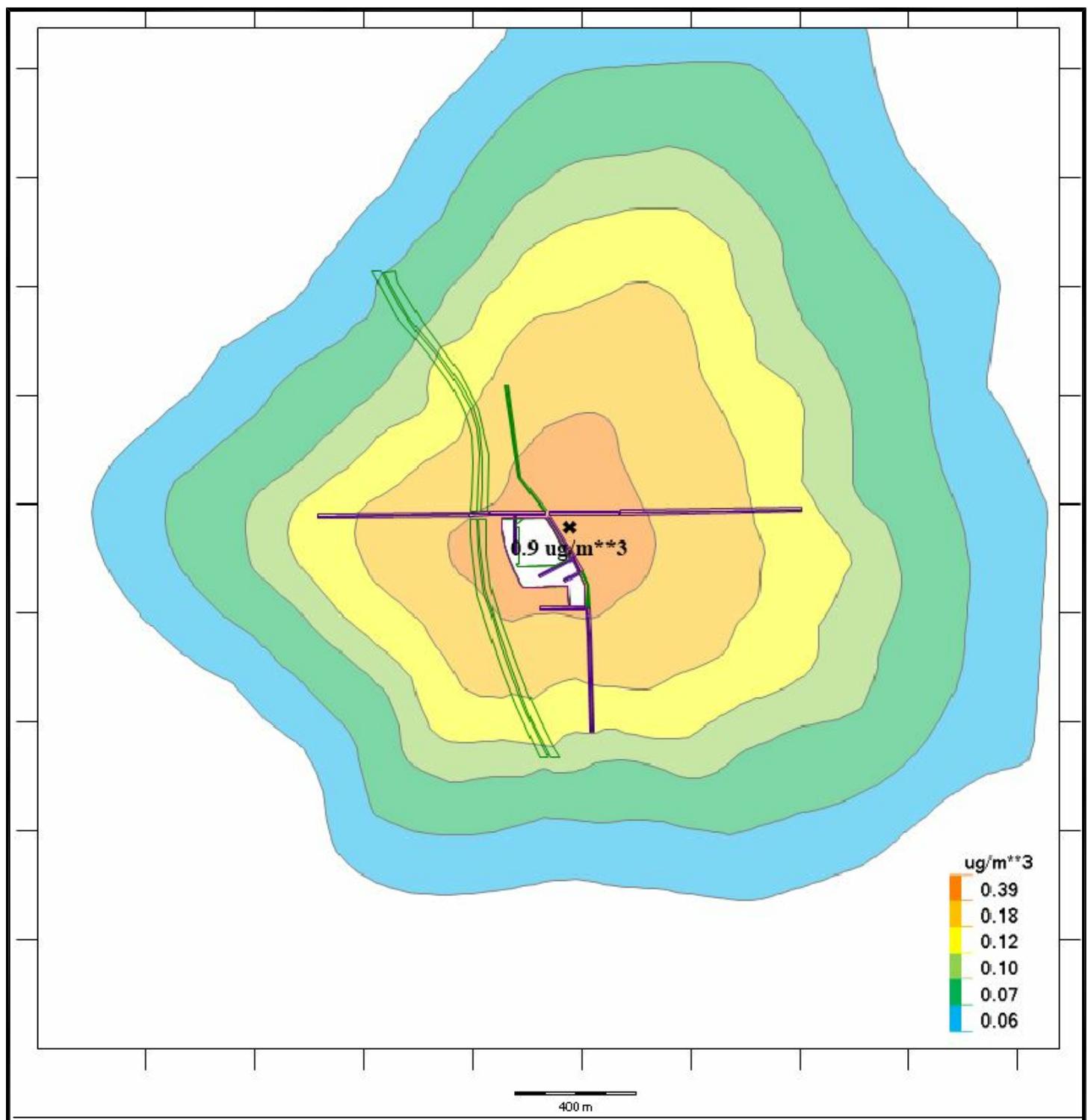
Prepared by: RE Scale: AS SHOWN

Project Mgr: TZ Project: 3637.0001I004

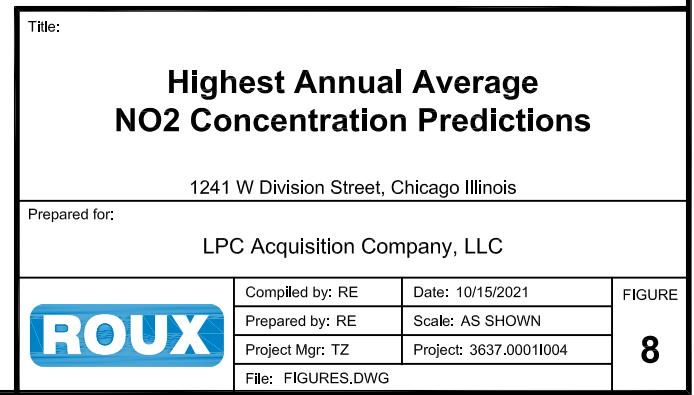
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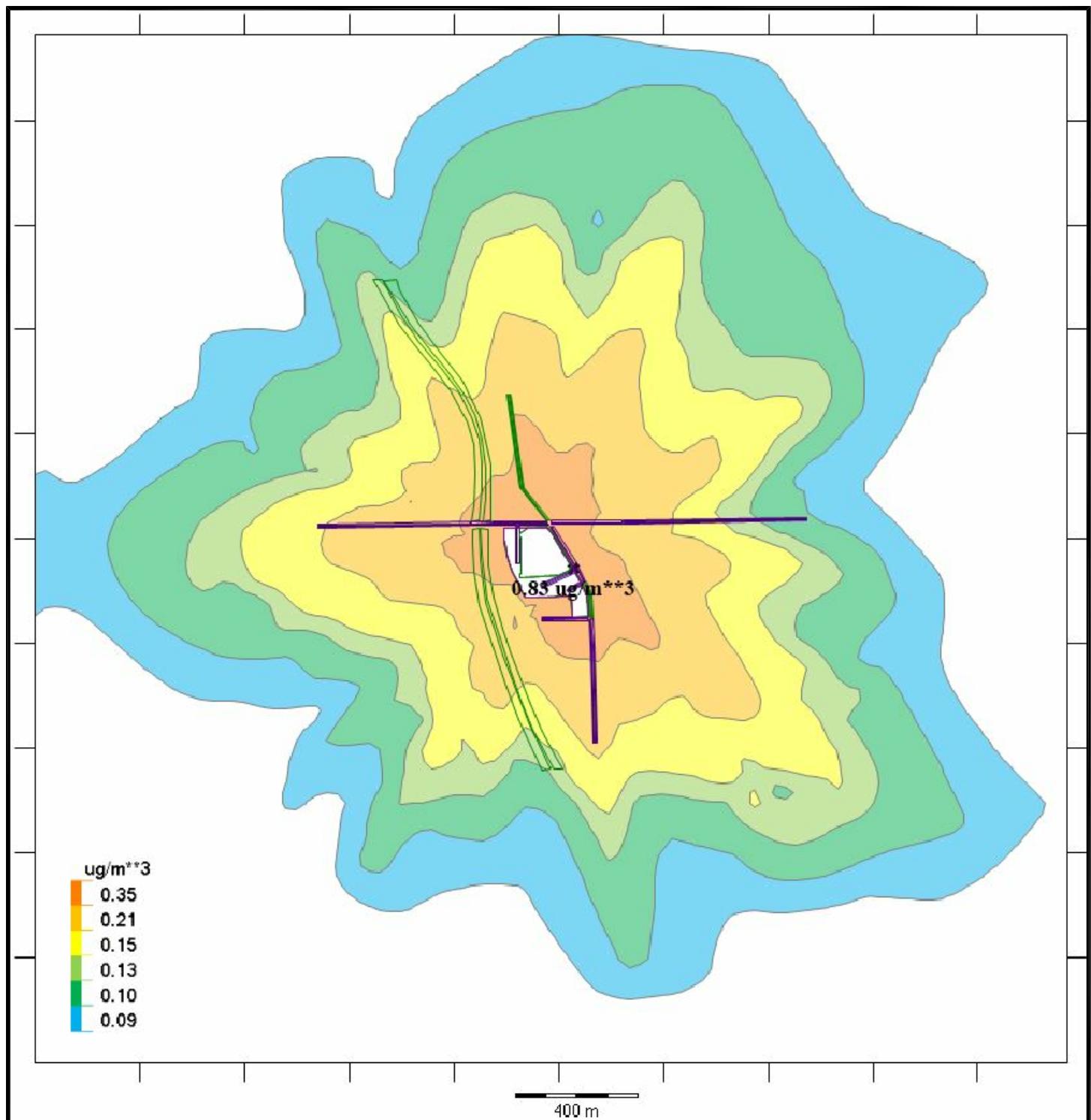
FIGURE

7

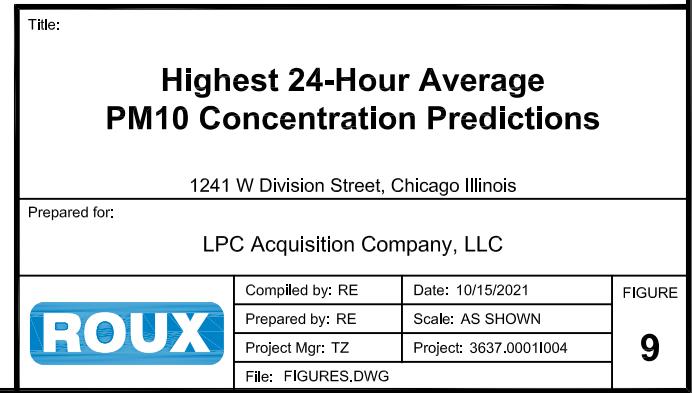


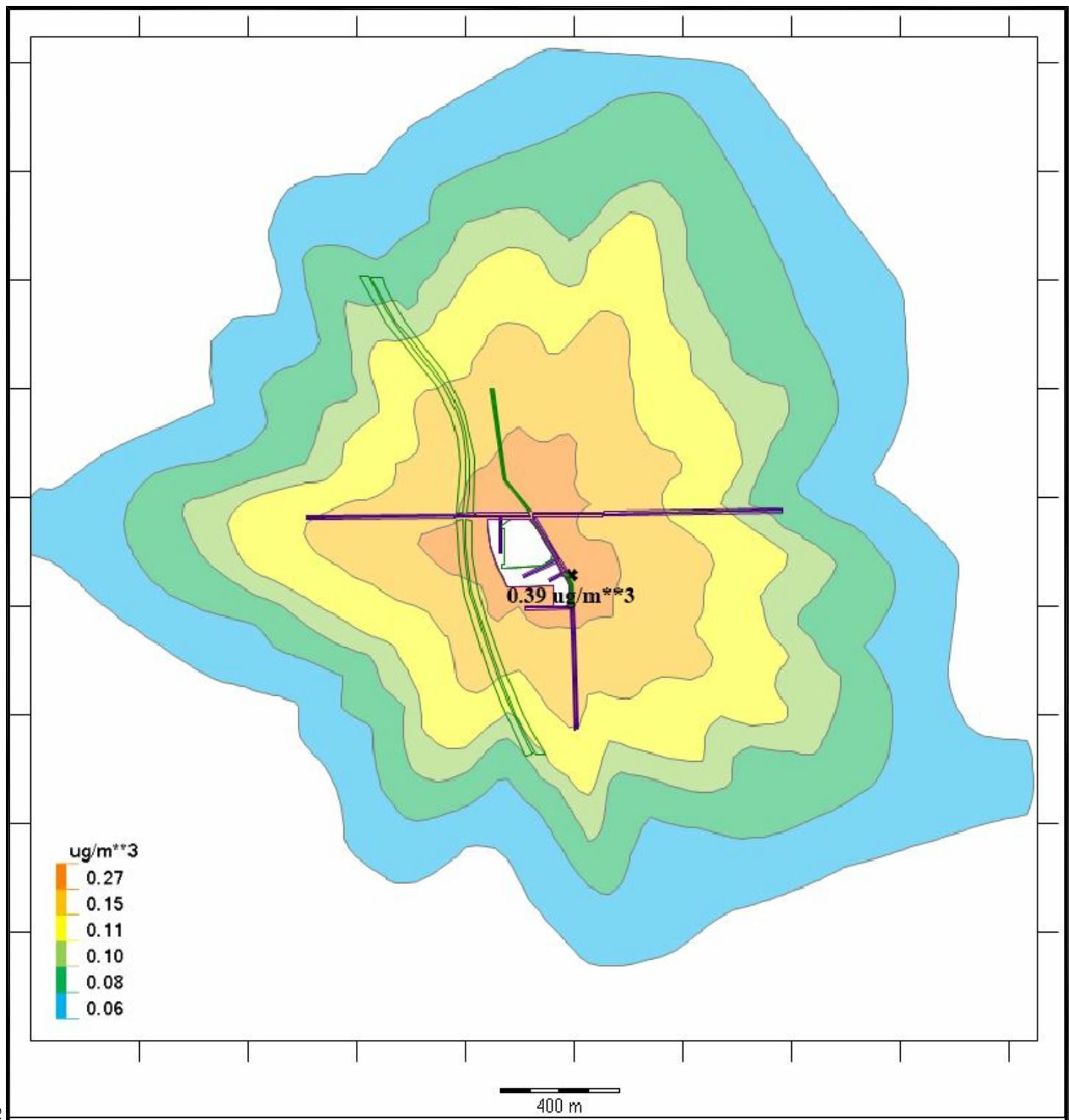
TRILOGISTICS PROPERTY COMPANY DIVISION C FIGURES.DWG





TRILOGISTICS PROPERTY COMPANY DIVISION C FIGURES.DWG





Title:

Highest 24-Hour Average PM2.5 Concentration Predictions

1241 W Division Street, Chicago Illinois

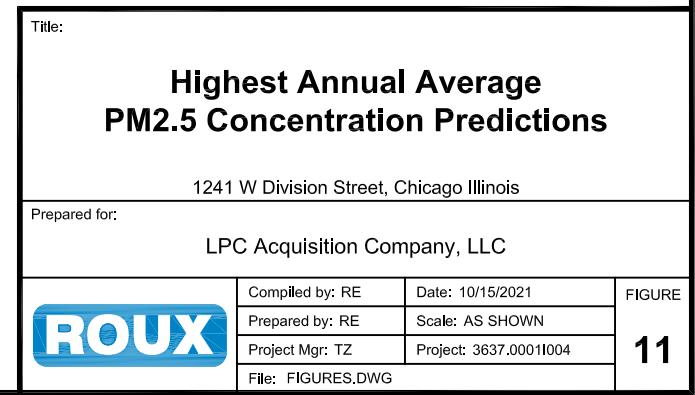
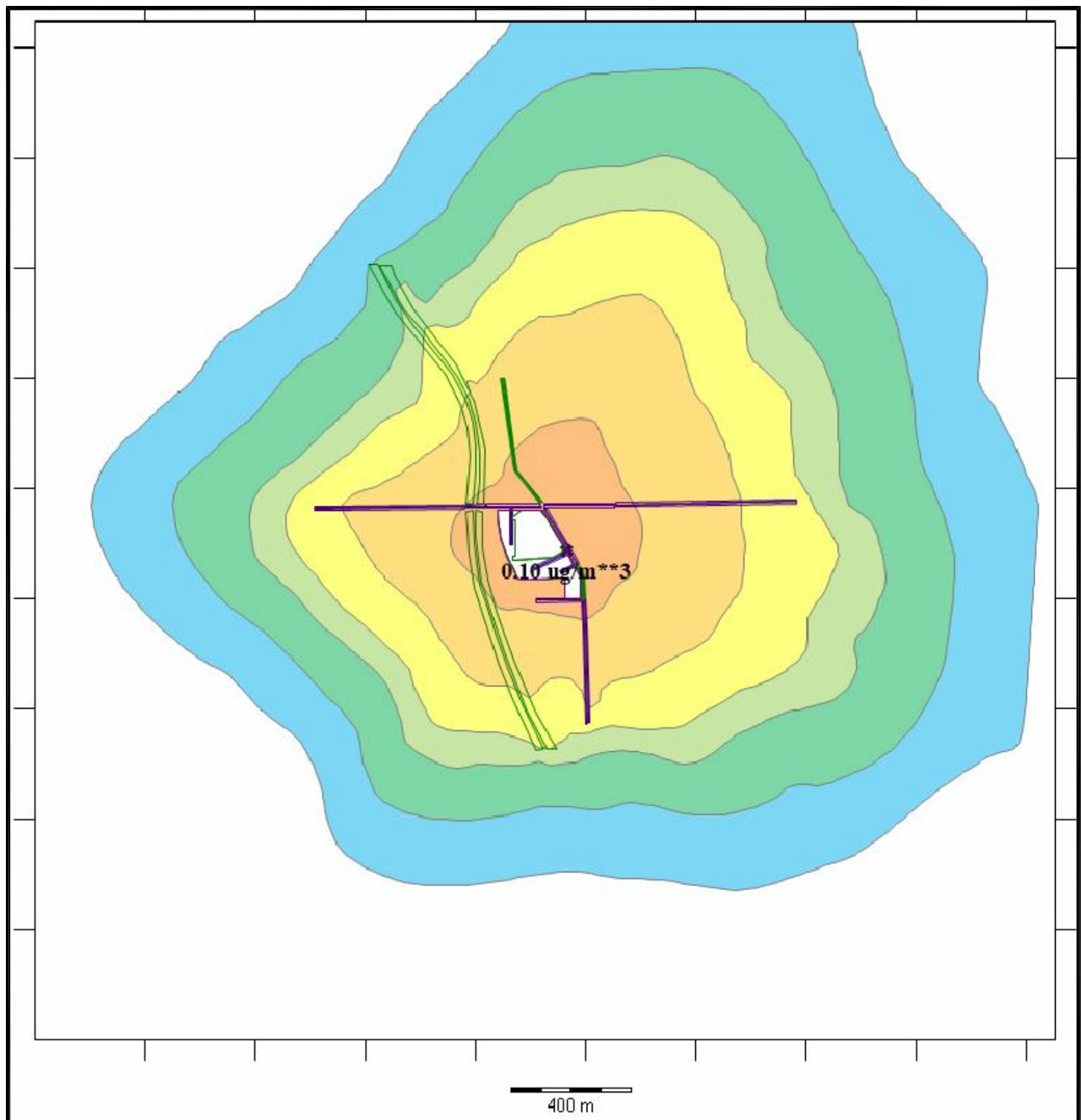
Prepared for:

LPC Acquisition Company, LLC

ROUX

Compiled by: RE	Date: 10/15/2021
Prepared by: RE	Scale: AS SHOWN
Project Mgr: TZ	Project: 3637.0001I004
File: FIGURES.DWG	

FIGURE
10



Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois

APPENDICES

- A. Excerpts from the Architectural Renderings for the Proposed Redevelopment Project at the Site
- B. Projected Passenger Vehicle Trips for each Hour of the Day
- C. MOVES Model Electronic Run Files
- D. Variable Emission Rates used in AERMOD Mobile Source Input
- E. AERMOD Model Input Summary
- F. AERMOD Model Results Summary
- G. AERMOD Model Electronic Run Files

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX A

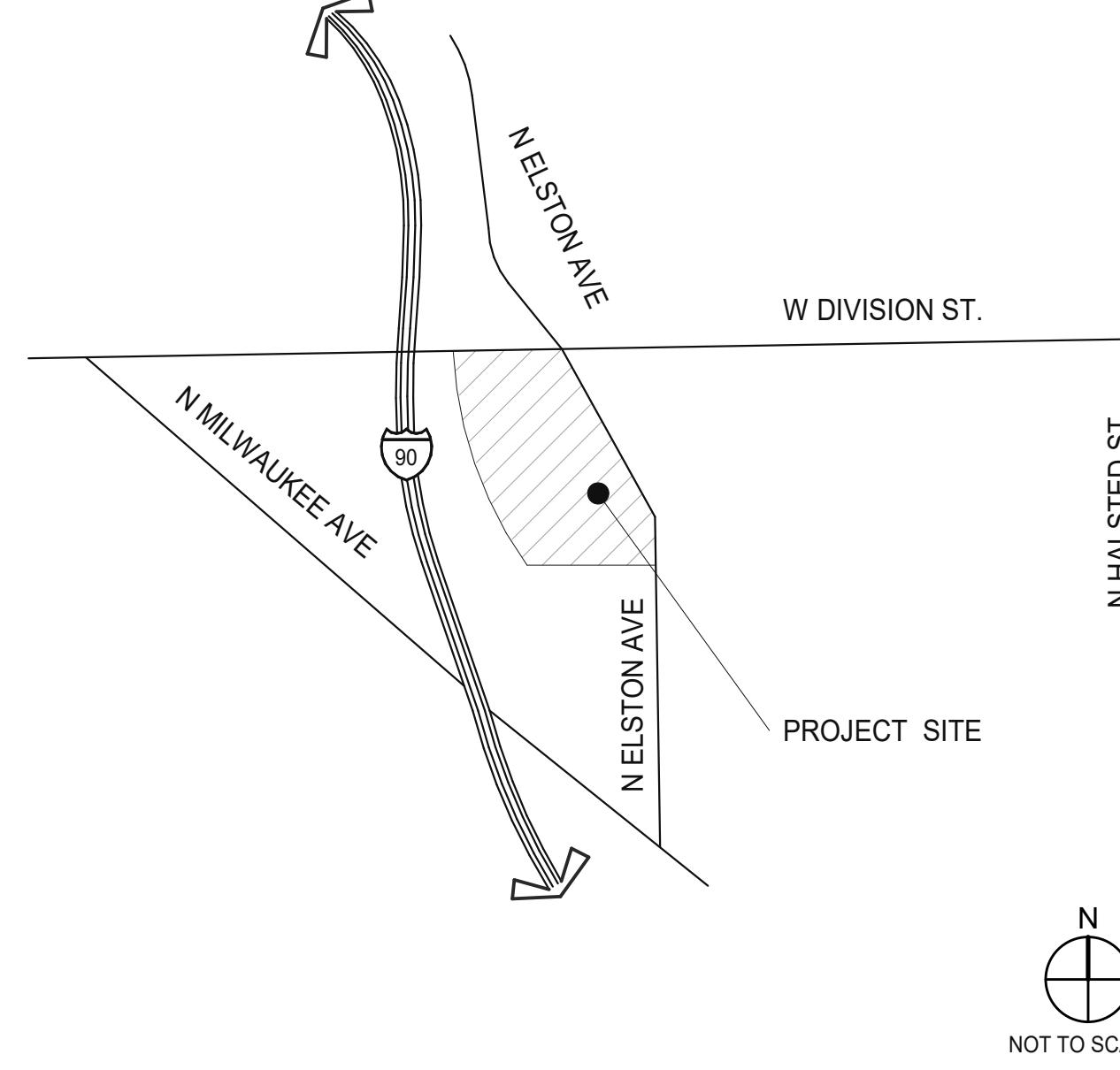
Excerpts from the Architectural Renderings for the
Proposed Redevelopment Project at the Site

PROJECT HEAT

DIVISION & ELSTON

CHICAGO, ILLINOIS 60642



VICINITY MAP	OWNER	OWNER'S CONSULTANTS	ARCHITECT'S CONSULTANTS	DEFERRED SUBMITTALS
 <p>NOT TO SCALE</p> <p>BM-301-CR05-001-06-Division and Elston 021_JAHCW4</p>	COMPANY NAME LOGISTICS PROPERTY CO ONE NORTH WACKER DRIVE, SUITE 1925 CHICAGO, IL 60606 GENERAL CONTRACTOR TBD ARCHITECT WARE MALCOMB 1315 22ND St #410 OAK BROOK, IL 60523 OWNER WIL FREVE ONE NORTH WACKER DRIVE, SUITE 1925 CHICAGO, IL 60606 wfreve@logisticspropco.com	CIVIL ENGINEER V3 COMPANIES 7325 JANES AVENUE WOODRIDGE, IL 60517 GEOTECHNICAL ENGINEER FIRM NAME STREET CITY, STATE ZIP CODE MECHANICAL ENGINEER T.B.D. PLUMBING ENGINEER T.B.D. ELECTRICAL ENGINEER T.B.D.	STRUCTURAL ENGINEER STRUCTURAL - DCI 728 134TH STREET SW, SUITE 220 EVERETT, WA 98204 LANDSCAPE ARCHITECT IVES RYAN 1741 WIESBROOK RD S WHEATON, IL 60189 ARCHITECT'S CONSULTANTS DANIELLE JACOBS PH: (206) 787-8916 djacobs@dci-engineers.com	<p>DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEERS OF RECORD WHO SHALL REVIEW AND PROVIDE NOTATION INDICATING DOCUMENTS HAVE BEEN REVIEWED AND FOUND TO BE IN GENERAL CONFORMANCE WITH THE BUILDING DESIGN. SUBMITTAL MATERIALS SHALL INCLUDE PLANS, DETAILS AND CALCULATIONS PREPARED AND SIGNATURED BY THE ARCHITECT AND ENGINEER. THE CONTRACTOR SHALL SUBMIT ARCHITECT AND ENGINEER REVIEWED SUBMITTAL MATERIALS TO THE BUILDING OFFICIAL FOR REVIEW AND PERMIT APPROVAL. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED PRIOR TO OBTAINING THE BUILDING OFFICIAL'S APPROVAL OF THE SUBMITTAL.</p> <ol style="list-style-type: none"> 1. AUTOMATIC FIRE SPRINKLER SYSTEM. 2. FIRE ALARM SYSTEM. 3. STEEL STAIRS, LADDERS AND GUARDS CONFORMING TO SJI STANDARDS SPECIFICATIONS. 4. STEEL STAIRS, HANDRAILS AND GUARDS. 5. HIGH PILED STORAGE RACKING. 6. EXTERIOR BUILDING SIGNAGE. 7. ANCHORAGE DEVICES FOR ALL ELECTRICAL EQUIPMENT REQUIRED. 8. STOREFRONT AND CURTAIN WALL GLAZING SYSTEMS.

WARE MALCOMB
Leading Design for Commercial Real Estate

PROJECT
HEAT
DIVISION & ELSTON
CHICAGO, ILLINOIS 60642


TITLE SHEET	
REMARKS	

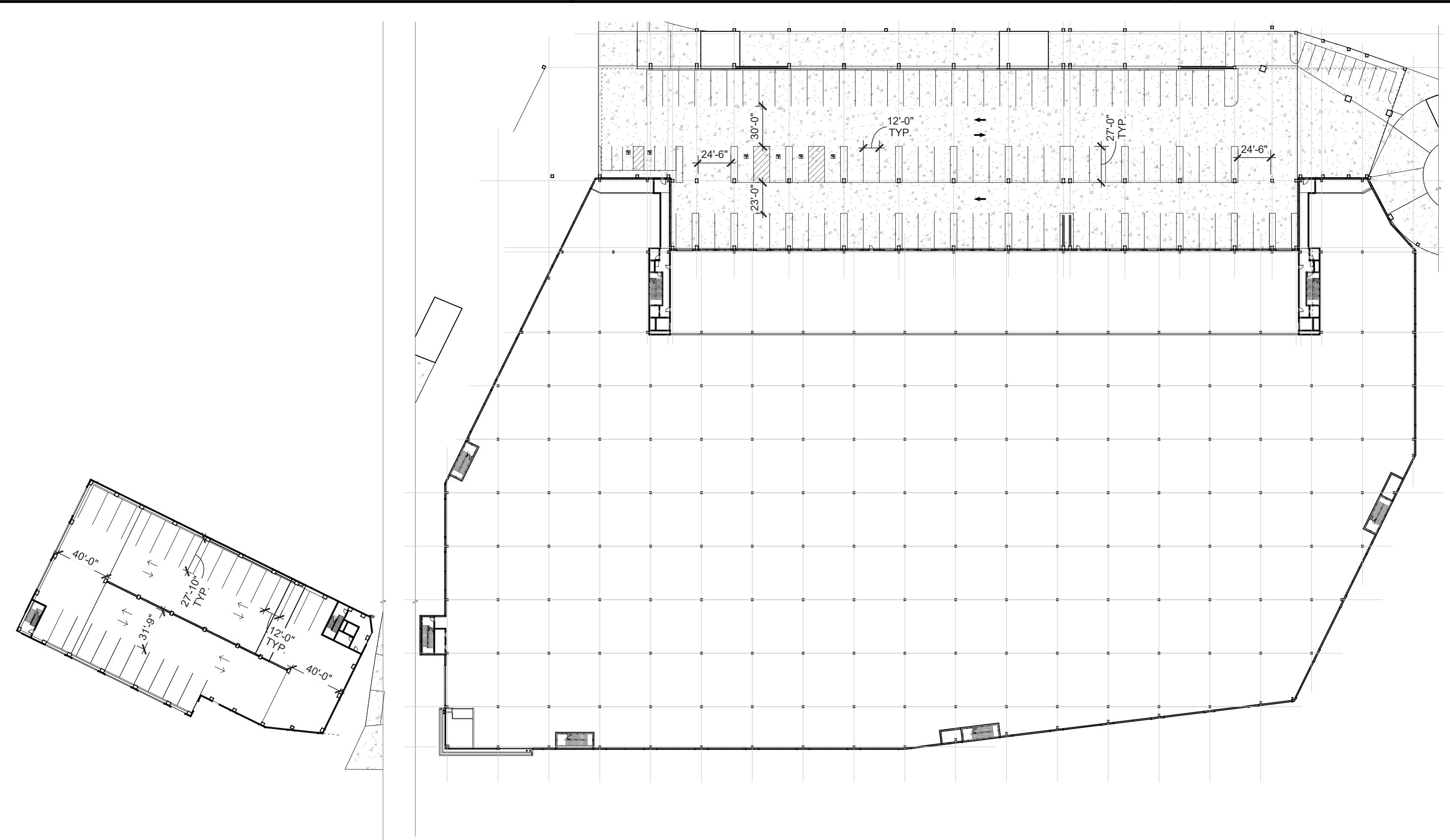
DATE	80% DD SET
1	07/16/2021
2	08/21/2021

P/A/P/M:	I. GEORGIEVA
DRAWN BY:	C.O.
JOB NO.:	CH120-5021-00

A0.1
100% DD SET

These drawings and specifications are the property and copyright of Ware Malcomb and shall not be used on any other work except by agreement with Ware Malcomb. Written dimensions shall take precedence over scaled dimensions and shall be brought to the notice of Ware Malcomb prior to the commencement of any work.

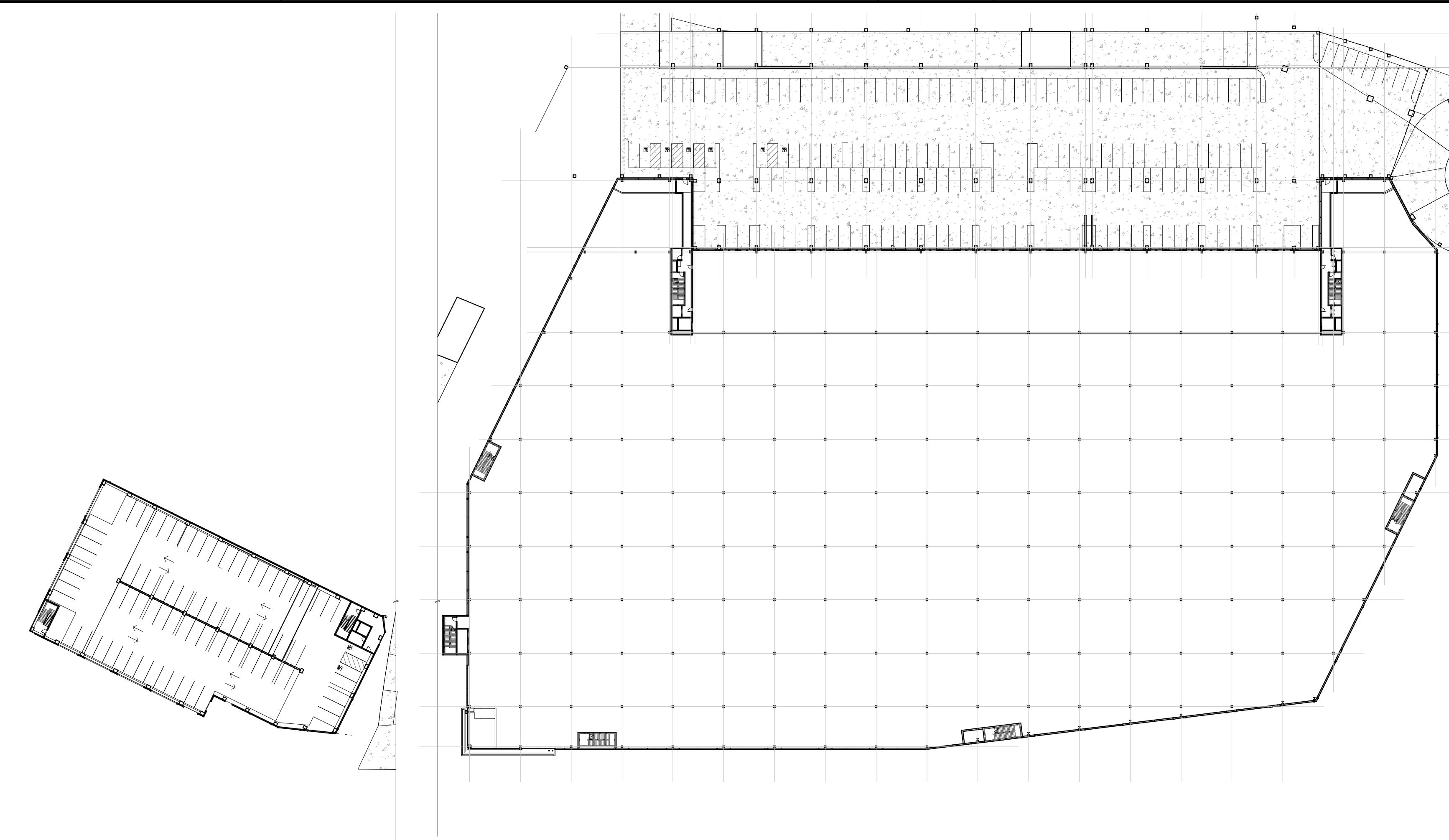




PARKING LAYOUT OPTION - LEVEL 1M (VAN)

3

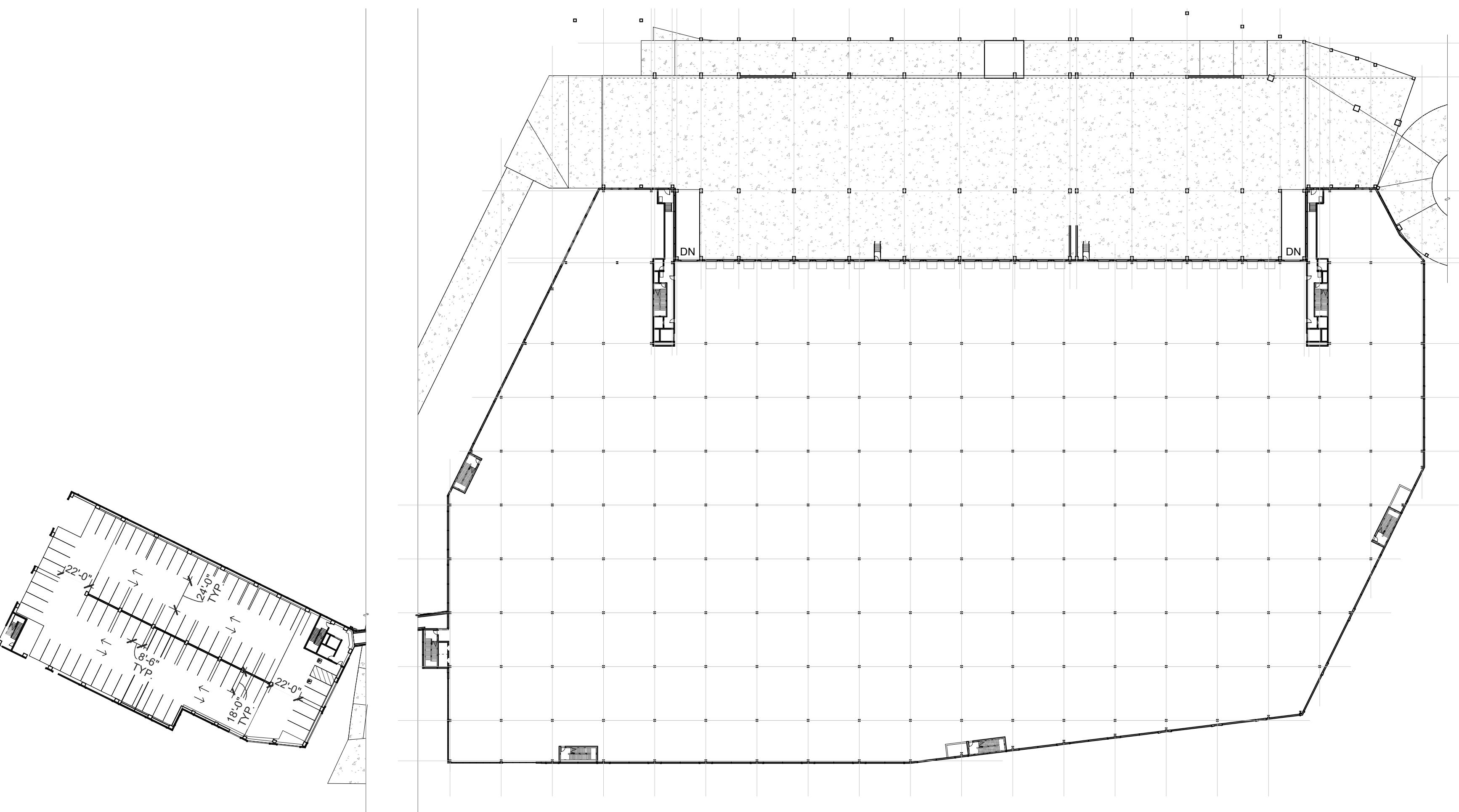
	<u>CAR (STALLS)</u>	<u>VAN (STALLS)</u>
WAREHOUSE:	15 (2 ADA)	94 (4 ADA)
PARKING GARAGE:	0	26



PARKING LAYOUT OPTION - LEVEL 1M (CAR)

SCALE: 1" = 60'-0"

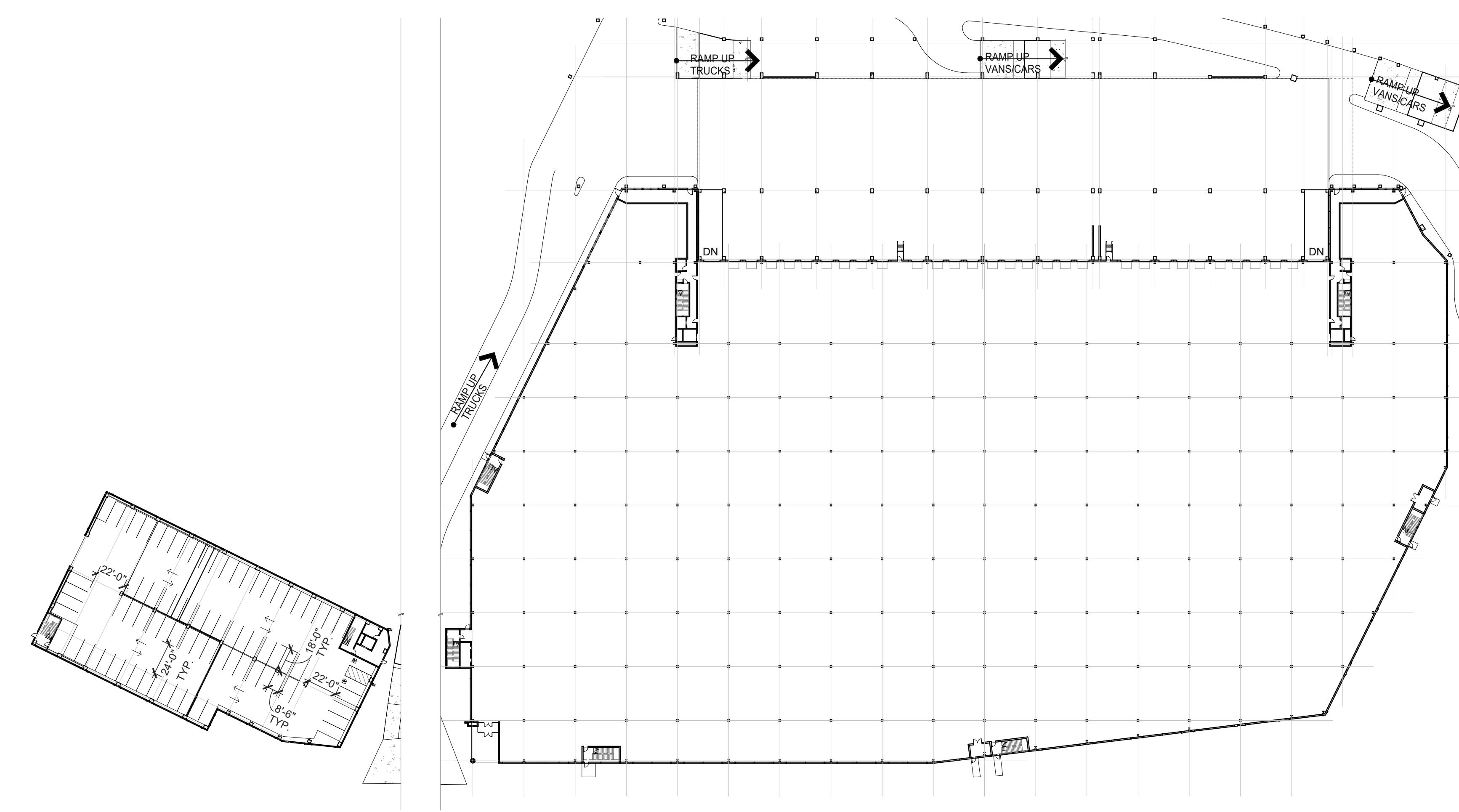
	<u>CAR (STALLS)</u>	<u>VAN (STALLS)</u>
WAREHOUSE:	187 (6 ADA)	0
PARKING GARAGE:	80 (2 ADA) TYP.	0



PARKING LAYOUT OPTION - LEVEL 2 (CAR)

SCALE: 1" = 60'-0"

	<u>CAR (STALLS)</u>	<u>VAN (STALLS)</u>
WAREHOUSE:	0	0
PARKING GARAGE:	80 (2 ADA) TYP.	0



PARKING LAYOUT OPTION - LEVEL 1 (CAR)

SCALE: 1" = 60'-0"

	<u>CAR (STALLS)</u>	<u>VAN (STALLS)</u>
WAREHOUSE:	0	0
PARKING GARAGE:	80 (2 ADA) TYP.	0

PROJECT HEAT

DIVISION & ELSTON
CHICAGO, ILLINOIS 60644

DIVISION & ELSTON
CHICAGO, ILLINOIS 60642

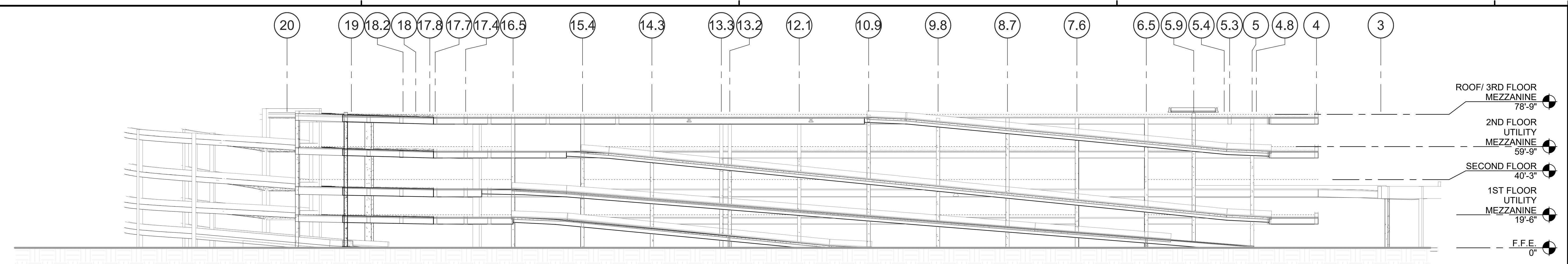
PARKING OPTIONS

REMARKS _____
DD SET

PA/PM:	I. GEORGIEVA
DRAWN BY.:	C.Q.
JOB NO.:	CHI20-5021-00

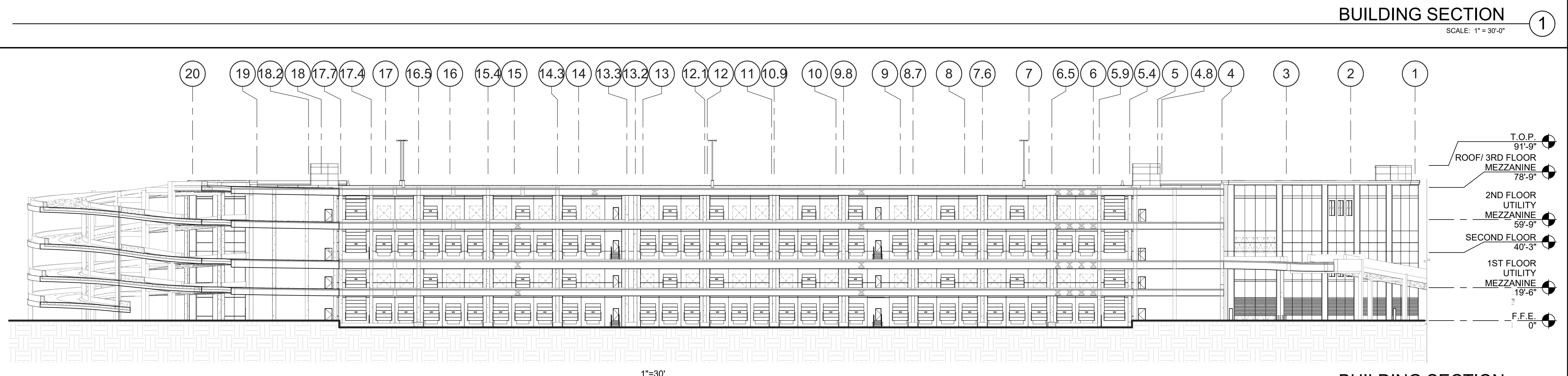
SHEET 1

100% DD SET



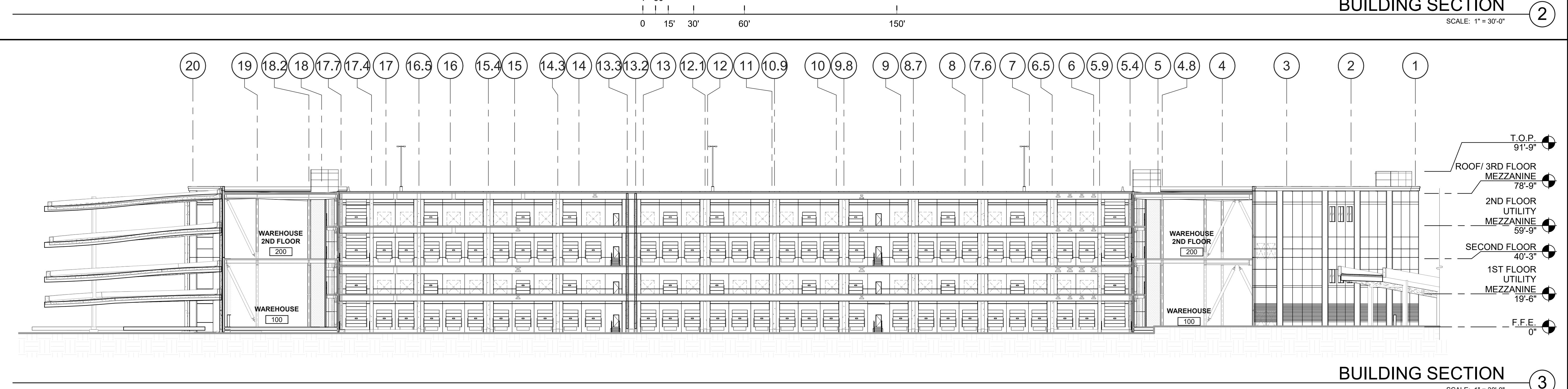
KEYNOTES:

SEE SHEET A0.2 FOR GENERAL NOTES

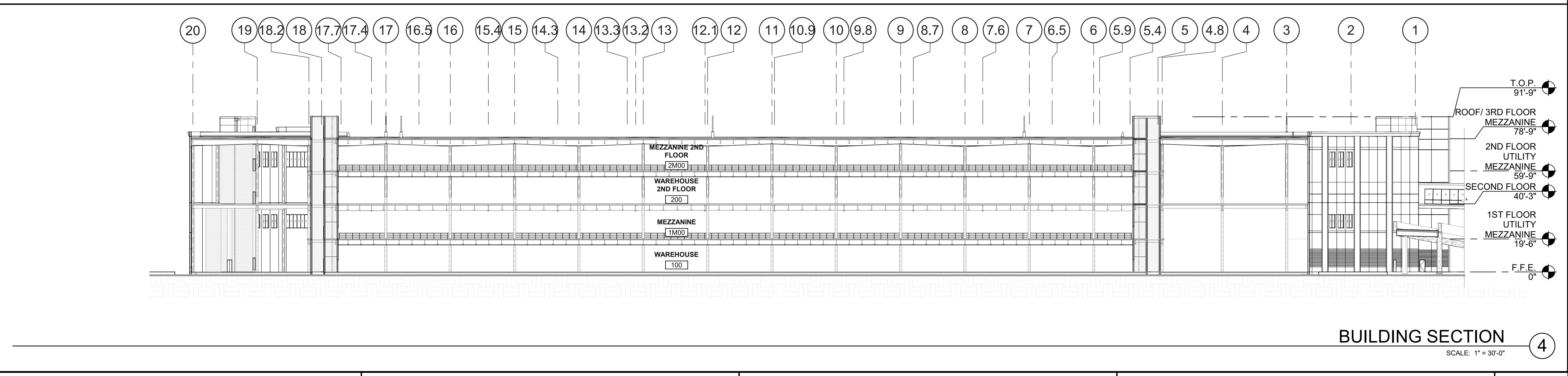


WARE MALCOMB
Leading Design for Commercial Real Estate

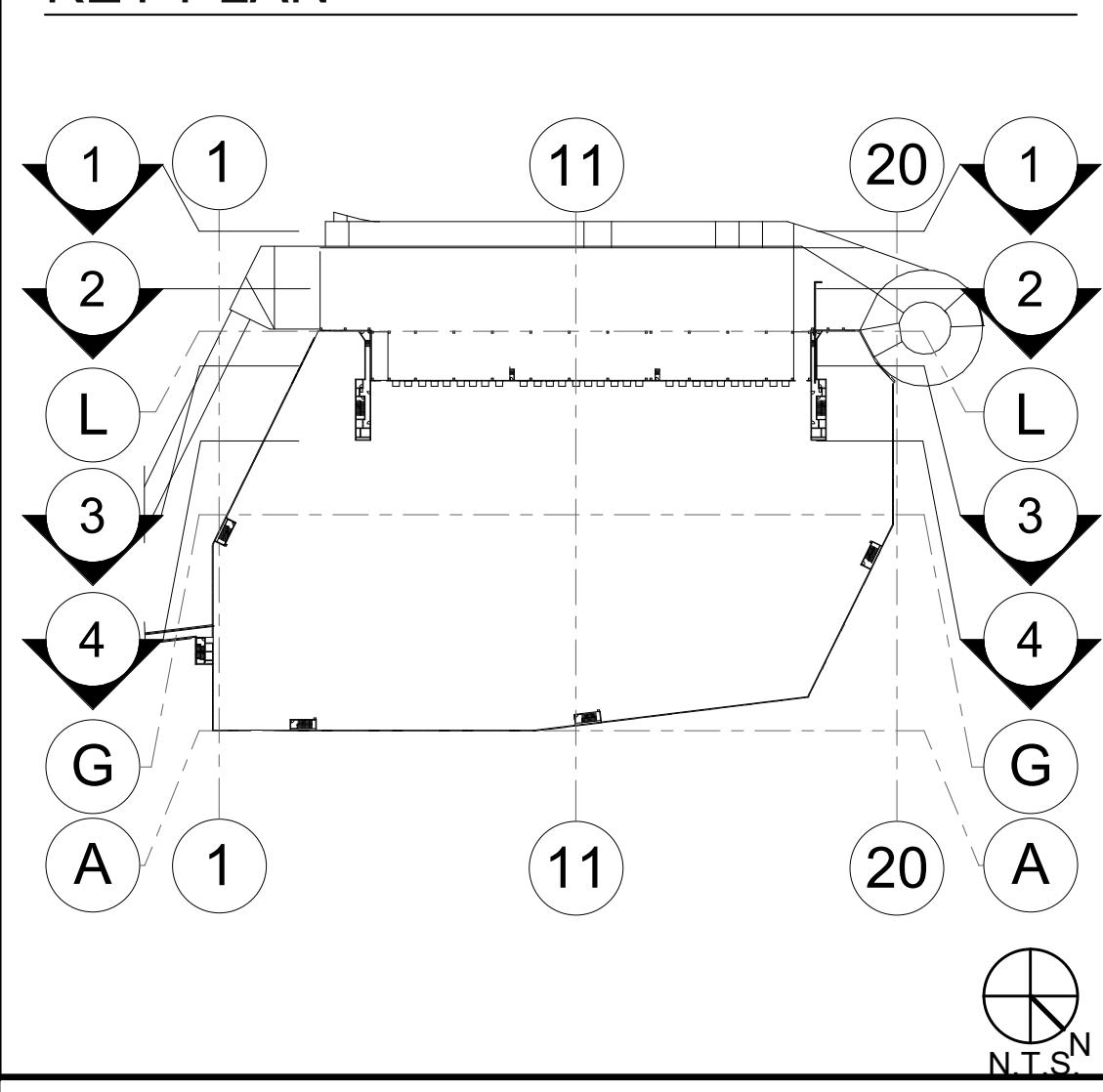
architecture
planning
interiors
graphics
civil engineering
500 W. Madison St #1000
Chicago, IL 60661
P 312.837.4600



PROJECT
HEAT
DIVISION & ELSTON
CHICAGO, ILLINOIS 60642



KEY PLAN



BUILDING SECTIONS

REMARKS

DATE	80% DD SET	100% DD SET	CROSSOVER SET
1 07/16/2021			
2 09/21/2021			

P/A/P/M: I. GEORGIEVA
DRAWN BY: C.O.
JOB NO.: CH120-5021-00

SHEET

A5.0

100% DD SET

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX B

Projected Passenger Vehicle Trips for each Hour of
the Day

TRIPS PER HOUR BY VEHICLE TYPE

Building Size	594,296
----------------------	----------------

Time	Personal Car	Heavy Vehicle	Local Delivery	Total
0:00	1	1	0	2
1:00	3	1	0	4
2:00	3	1	0	4
3:00	5	1	0	6
4:00	10	2	0	12
5:00	22	5	0	27
6:00	44	11	0	55
7:00	51	13	0	64
8:00	78	19	10	107
9:00	45	12	105	162
10:00	76	19	105	200
11:00	53	13	0	66
12:00	60	15	0	75
13:00	46	12	0	58
14:00	49	12	0	61
15:00	70	18	0	88
16:00	80	19	0	99
17:00	46	12	0	58
18:00	19	5	0	24
19:00	6	2	105	113
20:00	5	0	105	110
21:00	5	1	0	6
22:00	5	1	0	6
23:00	6	2	0	8
Full Day	788	197	430	1,415

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX C

MOVES Model Electronic Run Files

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX D

Variable Emission Rates used in AERMOD Mobile Source Input

- D1: PM2.5
- D2: PM10
- D3: NO2

Appendix C1

Variable Emission Rates for PM2.5 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22	
			Link Length (m)	180	85	120	120	100	-	230	230	-	600	600	-	160	160	120	120	50	50	50				
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300	300	
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	4.2019E-09	1.1765E-08	1.26E-08	1.8E-09	6.723E-09	3.7361E-09	1.2392E-09	8.4038E-10	0	0	0	8.4038E-10	0	0	9.4325E-09	4.7162E-09	9.0002E-09	5.4001E-09	6.6027E-09	2.8297E-09	1.8E-09		
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	4.2019E-09	1.1765E-08	1.26E-08	1.8E-09	6.723E-09	3.7361E-09	1.2392E-09	8.4038E-10	0	0	0	8.4038E-10	0	0	9.4325E-09	4.7162E-09	9.0002E-09	5.4001E-09	6.6027E-09	2.8297E-09	1.8E-09		
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	4.2019E-09	1.1765E-08	1.26E-08	1.8E-09	6.723E-09	3.7361E-09	1.2392E-09	8.4038E-10	0	0	0	8.4038E-10	0	0	9.4325E-09	4.7162E-09	9.0002E-09	5.4001E-09	6.6027E-09	2.8297E-09	1.8E-09		
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	4.2019E-09	1.1765E-08	1.26E-08	1.8E-09	6.723E-09	3.7361E-09	1.2392E-09	8.4038E-10	0	0	0	8.4038E-10	0	0	9.4325E-09	4.7162E-09	9.0002E-09	5.4001E-09	6.6027E-09	2.8297E-09	1.8E-09		
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	4.2019E-09	1.1765E-08	1.26E-08	1.8E-09	6.723E-09	3.7361E-09	1.2392E-09	8.4038E-10	0	0	0	8.4038E-10	0	0	9.4325E-09	4.7162E-09	9.0002E-09	5.4001E-09	6.6027E-09	2.8297E-09	1.8E-09		
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	1.5127E-08	4.7902E-08	5.2201E-08	7.2001E-09	2.6892E-08	1.3699E-08	4.9567E-09	1.6808E-09	8.4038E-10	0	0	0	8.4038E-10	1.6808E-09	0	0	3.8673E-08	1.7922E-08	3.7801E-08	2.16E-08	2.4524E-08	1.0376E-08	3.6001E-09
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	1.5127E-08	4.7902E-08	5.2201E-08	7.2001E-09	2.6892E-08	1.3699E-08	4.9567E-09	1.6808E-09	8.4038E-10	0	0	0	8.4038E-10	1.6808E-09	0	0	3.8673E-08	1.7922E-08	3.7801E-08	2.16E-08	2.4524E-08	1.0376E-08	3.6001E-09
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	1.5127E-08	4.7902E-08	5.2201E-08	7.2001E-09	2.6892E-08	1.3699E-08	4.9567E-09	1.6808E-09	8.4038E-10	0	0	0	8.4038E-10	1.6808E-09	0	0	3.8673E-08	1.7922E-08	3.7801E-08	2.16E-08	2.4524E-08	1.0376E-08	3.6001E-09
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	1.5127E-08	4.7902E-08	5.2201E-08	7.2001E-09	2.6892E-08	1.3699E-08	4.9567E-09	1.6808E-09	8.4038E-10	0	0	0	8.4038E-10	1.6808E-09	0	0	3.8673E-08	1.7922E-08	3.7801E-08	2.16E-08	2.4524E-08	1.0376E-08	3.6001E-09
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	5.7986E-08	4.0338E-08	4.5001E-08	4.3201E-08	3.5296E-08	9.9628E-09	2.974E-08	1.6808E-09	5.0423E-09	0	0	0	5.0423E-09	1.6808E-09	0	0	3.1127E-08	7.546E-08	3.06E-08	1.656E-07	4.3389E-08	1.6978E-08	7.2001E-09
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	5.7986E-08	4.0338E-08	4.5001E-08	4.3201E-08	3.5296E-08	9.9628E-09	2.974E-08	1.6808E-09	5.0423E-09	0	0	0	5.0423E-09	1.6808E-09	0	0	3.1127E-08	7.546E-08	3.06E-08	1.656E-07	4.3389E-08	1.6978E-08	7.2001E-09
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	5.7986E-08	4.0338E-08	4.5001E-08	4.3201E-08	3.5296E-08	9.9628E-09	2.974E-08	1.6808E-09	5.0423E-09	0	0	0	5.0423E-09	1.6808E-09	0	0	3.1127E-08	7.546E-08	3.06E-08	1.656E-07	4.3389E-08	1.6978E-08	7.2001E-09
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	5.7986E-08	4.0338E-08	4.5001E-08	4.3201E-08	3.5296E-08	9.9628E-09	2.974E-08	1.6808E-09	5.0423E-09	0	0	0	5.0423E-09	1.6808E-09	0	0	3.1127E-08	7.546E-08	3.06E-08	1.656E-07	4.3389E-08	1.6978E-08	7.2001E-09
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	5.7986E-08	4.0338E-08	4.5001E-08	4.3201E-08	3.5296E-08	9.9628E-09	2.974E-08	1.6808E-09	5.0423E-09	0	0	0	5.0423E-09	1.6808E-09	0	0	3.1127E-08	7.546E-08	3.06E-08	1.656E-07	4.3389E-08	1.6978E-08	7.2001E-09
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	4.454E-08	1.9329E-08	2.34E-08	1.8E-08	1.6808E-08	4.9814E-09	1.3631E-08	8.4038E-10	2.5211E-09	0	0	0	2.5211E-09	8.4038E-10	0	0	1.4149E-08	5.3765E-08	1.44E-08	5.5801E-08	1.2262E-08	3.49E-08	1.26E-08
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	4.454E-08	1.9329E-08	2.34E-08	1.8E-08	1.6808E-08	4.9814E-09	1.3631E-08	8.4038E-10	2.5211E-09	0	0	0	2.5211E-09	8.4038E-10	0	0	1.4149E-08	5.3765E-08	1.44E-08	5.5801E-08	1.2262E-08	3.49E-08	1.26E-08
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	4.454E-08	1.9329E-08	2.34E-08	1.8E-08	1.6808E-08	4.9814E-09	1.3631E-08	8.4038E-10	2.5211E-09	0	0	0	2.5211E-09	8.4038E-10	0	0	1.4149E-08	5.3765E-08	1.44E-08	5.5801E-08	1.2262E-08	3.49E-08	1.26E-08
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	4.454E-08	1.9329E-08	2.34E-08	1.8E-08	1.6808E-08	4.9814E-09	1.3631E-08	8.4038E-10	2.5211E-09	0	0	0	2.5211E-09	8.4038E-10	0	0	1.4149E-08	5.3765E-08	1.44E-08	5.5801E-08	1.2262E-08	3.49E-08	1.26E-08
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	4.454E-08	1.9329E-08	2.34E-08	1.8E-08	1.6808E-08	4.9814E-09	1.3631E-0																

Appendix C1

Variable Emission Rates for PM2.5 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44
			Link Length (m)	50	-	-	150	150	90	60	60	320	320	-	-	500	500	65	65	-	-	-	-	-	
			Link Area (m ²)	300	579	567	900	900	540	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	1.8E-09	8.8941E-09	3.8936E-09	1.44E-08	3.6001E-09	9.4325E-10	2.8297E-09	0	0	9.4325E-10	2.8297E-09	0	0	8.2335E-11	7.9632E-11	8.4038E-10	2.5211E-09	2.5211E-09	6.723E-09	2.3835E-10	7.308E-10	1.2042E-09
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	1.8E-09	8.8941E-09	3.8936E-09	1.44E-08	3.6001E-09	9.4325E-10	2.8297E-09	0	0	9.4325E-10	2.8297E-09	0	0	8.2335E-11	7.9632E-11	8.4038E-10	2.5211E-09	2.5211E-09	6.723E-09	2.3835E-10	7.308E-10	1.2042E-09
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	1.8E-09	8.8941E-09	3.8936E-09	1.44E-08	3.6001E-09	9.4325E-10	2.8297E-09	0	0	9.4325E-10	2.8297E-09	0	0	8.2335E-11	7.9632E-11	8.4038E-10	2.5211E-09	2.5211E-09	6.723E-09	2.3835E-10	7.308E-10	1.2042E-09
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	1.8E-09	8.8941E-09	3.8936E-09	1.44E-08	3.6001E-09	9.4325E-10	2.8297E-09	0	0	9.4325E-10	2.8297E-09	0	0	8.2335E-11	7.9632E-11	8.4038E-10	2.5211E-09	2.5211E-09	6.723E-09	2.3835E-10	7.308E-10	1.2042E-09
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	1.8E-09	8.8941E-09	3.8936E-09	1.44E-08	3.6001E-09	9.4325E-10	2.8297E-09	0	0	9.4325E-10	2.8297E-09	0	0	8.2335E-11	7.9632E-11	8.4038E-10	2.5211E-09	2.5211E-09	6.723E-09	2.3835E-10	7.308E-10	1.2042E-09
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	3.6001E-09	3.3035E-08	1.4277E-08	5.4001E-08	1.62E-08	3.773E-09	9.4325E-09	0	0	3.773E-09	9.4325E-09	0	0	2.7445E-10	2.6544E-10	3.3615E-09	8.4038E-09	8.4038E-09	2.7733E-08	9.534E-10	2.9232E-09	1.9896E-09
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	3.6001E-09	3.3035E-08	1.4277E-08	5.4001E-08	1.62E-08	3.773E-09	9.4325E-09	0	0	3.773E-09	9.4325E-09	0	0	2.7445E-10	2.6544E-10	3.3615E-09	8.4038E-09	8.4038E-09	2.7733E-08	9.534E-10	2.9232E-09	1.9896E-09
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	3.6001E-09	3.3035E-08	1.4277E-08	5.4001E-08	1.62E-08	3.773E-09	9.4325E-09	0	0	3.773E-09	9.4325E-09	0	0	2.7445E-10	2.6544E-10	3.3615E-09	8.4038E-09	8.4038E-09	2.7733E-08	9.534E-10	2.9232E-09	1.9896E-09
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	3.6001E-09	3.3035E-08	1.4277E-08	5.4001E-08	1.62E-08	3.773E-09	9.4325E-09	0	0	3.773E-09	9.4325E-09	0	0	2.7445E-10	2.6544E-10	3.3615E-09	8.4038E-09	8.4038E-09	2.7733E-08	9.534E-10	2.9232E-09	1.9896E-09
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	7.2001E-09	5.8447E-08	1.817E-08	4.5001E-08	2.34E-08	2.7354E-08	8.4892E-09	0	0	2.7354E-08	8.4892E-09	0	0	2.4701E-10	2.389E-10	2.0169E-08	7.5634E-09	4.1179E-08	2.3531E-08	2.9794E-09	2.436E-09	5.1347E-09
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	7.2001E-09	5.8447E-08	1.817E-08	4.5001E-08	2.34E-08	2.7354E-08	8.4892E-09	0	0	2.7354E-08	8.4892E-09	0	0	2.4701E-10	2.389E-10	2.0169E-08	7.5634E-09	4.1179E-08	2.3531E-08	2.9794E-09	2.436E-09	5.1347E-09
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	7.2001E-09	5.8447E-08	1.817E-08	4.5001E-08	2.34E-08	2.7354E-08	8.4892E-09	0	0	2.7354E-08	8.4892E-09	0	0	2.4701E-10	2.389E-10	2.0169E-08	7.5634E-09	4.1179E-08	2.3531E-08	2.9794E-09	2.436E-09	5.1347E-09
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	7.2001E-09	5.8447E-08	1.817E-08	4.5001E-08	2.34E-08	2.7354E-08	8.4892E-09	0	0	2.7354E-08	8.4892E-09	0	0	2.7445E-10	2.6544E-10	3.3615E-09	8.4038E-09	8.4038E-09	2.7733E-08	9.534E-10	2.9232E-09	1.9896E-09
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	7.2001E-09	5.8447E-08	1.817E-08	4.5001E-08	2.34E-08	2.7354E-08	8.4892E-09	0	0	2.7354E-08	8.4892E-09	0	0	2.4701E-10	2.389E-10	2.0169E-08	7.5634E-09	4.1179E-08	2.3531E-08	2.9794E-09	2.436E-09	5.1347E-09
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	1.26E-08	1.6518E-08	3.2447E-08	1.98E-08	5.2201E-08	9.4325E-09	3.773E-09	0	0	9.4325E-09	3.773E-09	0	0	1.0978E-10	1.0618E-10	8.4038E-09	3.3615E-09	2.6052E-08	1.1765E-08	2.6218E-09	1.0962E-09	3.4322E-09
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	1.26E-08	1.6518E-08	3.2447E-08	1.98E-08	5.2201E-08	9.4325E-09	3.773E-09	0	0	9.4325E-09	3.773E-09	0	0	1.0978E-10	1.0618E-10	8.4038E-09	3.3615E-09	2.6052E-08	1.1765E-08	2.6218E-09	1.0962E-09	3.4322E-09
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	1.26E-08	1.6518E-08	3.2447E-08	1.98E-08	5.2201E-08	9.4325E-09	3.773E-09	0	0	9.4325E-09	3.773E-09	0	0	1.0978E-10	1.0618E-10	8.4038E-09	3.3615E-09	2.6052E-08	1.1765E-08	2.6218E-09	1.0962E-09	3.4322E-09
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	1.26E-08	1.6518E-08	3.2447E-08	1.98E-08	5.2201E-08	9.4325E-09	3.773E-09	0	0	9.4325E-09	3.773E-09	0	0	1.0978E-10	1.0618E-10	8.4038E-09	3.3615E-09	2.6052E-08	1.1765E-08	2.6218E-09	1.0962E-09	3.4322E-09
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	1.26E-08																					

Appendix C1

Variable Emission Rates for PM2.5 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22	
			Link Length (m)	180	85	120	120	100	-	230	230	-	-	600	600	-	-	160	160	120	120	50	50	50		
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300	300	
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	4.2008E-09	1.1762E-08	1.2598E-08	1.7997E-09	6.7213E-09	3.7352E-09	1.2389E-09	8.4017E-10	0	0	0	8.4017E-10	0	0	9.4302E-09	4.7151E-09	8.9986E-09	5.3992E-09	6.6012E-09	2.8291E-09	1.7997E-09		
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	4.2008E-09	1.1762E-08	1.2598E-08	1.7997E-09	6.7213E-09	3.7352E-09	1.2389E-09	8.4017E-10	0	0	0	8.4017E-10	0	0	9.4302E-09	4.7151E-09	8.9986E-09	5.3992E-09	6.6012E-09	2.8291E-09	1.7997E-09		
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	4.2008E-09	1.1762E-08	1.2598E-08	1.7997E-09	6.7213E-09	3.7352E-09	1.2389E-09	8.4017E-10	0	0	0	8.4017E-10	0	0	9.4302E-09	4.7151E-09	8.9986E-09	5.3992E-09	6.6012E-09	2.8291E-09	1.7997E-09		
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	4.2008E-09	1.1762E-08	1.2598E-08	1.7997E-09	6.7213E-09	3.7352E-09	1.2389E-09	8.4017E-10	0	0	0	8.4017E-10	0	0	9.4302E-09	4.7151E-09	8.9986E-09	5.3992E-09	6.6012E-09	2.8291E-09	1.7997E-09		
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	4.2008E-09	1.1762E-08	1.2598E-08	1.7997E-09	6.7213E-09	3.7352E-09	1.2389E-09	8.4017E-10	0	0	0	8.4017E-10	0	0	9.4302E-09	4.7151E-09	8.9986E-09	5.3992E-09	6.6012E-09	2.8291E-09	1.7997E-09		
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	1.5123E-08	4.789E-08	5.2192E-08	7.1989E-09	2.6885E-08	1.3696E-08	4.9555E-09	1.6803E-09	8.4017E-10	0	0	0	8.4017E-10	1.6803E-09	0	0	3.8664E-08	1.7917E-08	3.7794E-08	2.1597E-08	2.4519E-08	1.0373E-08	3.5994E-09
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	1.5123E-08	4.789E-08	5.2192E-08	7.1989E-09	2.6885E-08	1.3696E-08	4.9555E-09	1.6803E-09	8.4017E-10	0	0	0	8.4017E-10	1.6803E-09	0	0	3.8664E-08	1.7917E-08	3.7794E-08	2.1597E-08	2.4519E-08	1.0373E-08	3.5994E-09
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	1.5123E-08	4.789E-08	5.2192E-08	7.1989E-09	2.6885E-08	1.3696E-08	4.9555E-09	1.6803E-09	8.4017E-10	0	0	0	8.4017E-10	1.6803E-09	0	0	3.8664E-08	1.7917E-08	3.7794E-08	2.1597E-08	2.4519E-08	1.0373E-08	3.5994E-09
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	1.5123E-08	4.789E-08	5.2192E-08	7.1989E-09	2.6885E-08	1.3696E-08	4.9555E-09	1.6803E-09	8.4017E-10	0	0	0	8.4017E-10	1.6803E-09	0	0	3.8664E-08	1.7917E-08	3.7794E-08	2.1597E-08	2.4519E-08	1.0373E-08	3.5994E-09
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	5.7972E-08	4.0328E-08	4.4993E-08	4.3193E-08	3.5287E-08	9.9604E-09	2.9733E-08	1.6803E-09	5.041E-09	0	0	0	5.041E-09	1.6803E-09	0	0	3.112E-08	7.5442E-08	3.0595E-08	1.6557E-07	4.3379E-08	1.6974E-08	7.1989E-09
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	5.7972E-08	4.0328E-08	4.4993E-08	4.3193E-08	3.5287E-08	9.9604E-09	2.9733E-08	1.6803E-09	5.041E-09	0	0	0	5.041E-09	1.6803E-09	0	0	3.112E-08	7.5442E-08	3.0595E-08	1.6557E-07	4.3379E-08	1.6974E-08	7.1989E-09
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	5.7972E-08	4.0328E-08	4.4993E-08	4.3193E-08	3.5287E-08	9.9604E-09	2.9733E-08	1.6803E-09	5.041E-09	0	0	0	5.041E-09	1.6803E-09	0	0	3.112E-08	7.5442E-08	3.0595E-08	1.6557E-07	4.3379E-08	1.6974E-08	7.1989E-09
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	5.7972E-08	4.0328E-08	4.4993E-08	4.3193E-08	3.5287E-08	9.9604E-09	2.9733E-08	1.6803E-09	5.041E-09	0	0	0	5.041E-09	1.6803E-09	0	0	3.112E-08	7.5442E-08	3.0595E-08	1.6557E-07	4.3379E-08	1.6974E-08	7.1989E-09
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	5.7972E-08	4.0328E-08	4.4993E-08	4.3193E-08	3.5287E-08	9.9604E-09	2.9733E-08	1.6803E-09	5.041E-09	0	0	0	5.041E-09	1.6803E-09	0	0	3.112E-08	7.5442E-08	3.0595E-08	1.6557E-07	4.3379E-08	1.6974E-08	7.1989E-09
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	4.4529E-08	1.9324E-08	2.3396E-08	1.7997E-08	1.6803E-08	4.9802E-09	1.3628E-08	8.4017E-10	2.5205E-09	0	0	0	2.5205E-09	8.4017E-10	0	0	1.4145E-08	5.3752E-08	1.4398E-08	5.5791E-08	1.2259E-08	3.4892E-08	1.2598E-08
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	4.4529E-08	1.9324E-08	2.3396E-08	1.7997E-08	1.6803E-08	4.9802E-09	1.3628E-08	8.4017E-10	2.5205E-09	0	0	0	2.5205E-09	8.4017E-10	0	0	1.4145E-08	5.3752E-08	1.4398E-08	5.5791E-08	1.2259E-08	3.4892E-08	1.2598E-08
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	4.4529E-08	1.9324E-08	2.3396E-08	1.7997E-08	1.6803E-08	4.9802E-09	1.3628E-08	8.4017E-10	2.5205E-09	0	0	0	2.5205E-09	8.4017E-10	0	0	1.4145E-08	5.3752E-08	1.4398E-08	5.5791E-08	1.2259E-08	3.4892E-08	1.2598E-08
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	4.4529E-08	1.9324E-08	2.3396E-08	1.7997E-08	1.6803E-08	4.9802E-09	1.3628E-08	8.4017E-10	2.5205E-09	0	0	0	2.5205E-09	8.4017E-10	0	0	1.4145E-08	5.3752E-08	1.4398E-08	5.5791E-08	1.2259E-08	3.4892E-08	1.2598E-08

Appendix C1

Variable Emission Rates for PM2.5 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44
			Link Length (m)	50	-	-	150	150	90	60	60	320	320	-	-	500	500	65	65	-	-	-	-	-	
			Link Area (m ²)	300	579	567	900	900	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751	
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	1.7997E-09	8.892E-09	3.8927E-09	1.4398E-08	3.5994E-09	9.4302E-10	2.8291E-09	0	0	9.4302E-10	2.8291E-09	0	0	8.2316E-11	7.9613E-11	8.4017E-10	2.5205E-09	2.5205E-09	6.7213E-09	2.3827E-10	7.3056E-10	1.755E-10
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	1.7997E-09	8.892E-09	3.8927E-09	1.4398E-08	3.5994E-09	9.4302E-10	2.8291E-09	0	0	9.4302E-10	2.8291E-09	0	0	8.2316E-11	7.9613E-11	8.4017E-10	2.5205E-09	2.5205E-09	6.7213E-09	2.3827E-10	7.3056E-10	1.755E-10
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	1.7997E-09	8.892E-09	3.8927E-09	1.4398E-08	3.5994E-09	9.4302E-10	2.8291E-09	0	0	9.4302E-10	2.8291E-09	0	0	8.2316E-11	7.9613E-11	8.4017E-10	2.5205E-09	2.5205E-09	6.7213E-09	2.3827E-10	7.3056E-10	1.755E-10
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	1.7997E-09	8.892E-09	3.8927E-09	1.4398E-08	3.5994E-09	9.4302E-10	2.8291E-09	0	0	9.4302E-10	2.8291E-09	0	0	8.2316E-11	7.9613E-11	8.4017E-10	2.5205E-09	2.5205E-09	6.7213E-09	2.3827E-10	7.3056E-10	1.755E-10
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	1.7997E-09	8.892E-09	3.8927E-09	1.4398E-08	3.5994E-09	9.4302E-10	2.8291E-09	0	0	9.4302E-10	2.8291E-09	0	0	8.2316E-11	7.9613E-11	8.4017E-10	2.5205E-09	2.5205E-09	6.7213E-09	2.3827E-10	7.3056E-10	1.755E-10
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	3.5994E-09	3.3027E-08	1.4273E-08	5.3992E-08	1.6197E-08	3.7721E-09	9.4302E-09	0	0	3.7721E-09	9.4302E-09	0	0	2.7439E-10	2.6538E-10	3.3607E-09	8.4017E-09	8.4017E-09	2.7726E-08	9.5307E-10	2.9222E-09	2.2662E-10
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	3.5994E-09	3.3027E-08	1.4273E-08	5.3992E-08	1.6197E-08	3.7721E-09	9.4302E-09	0	0	3.7721E-09	9.4302E-09	0	0	2.7439E-10	2.6538E-10	3.3607E-09	8.4017E-09	8.4017E-09	2.7726E-08	9.5307E-10	2.9222E-09	2.2662E-10
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	3.5994E-09	3.3027E-08	1.4273E-08	5.3992E-08	1.6197E-08	3.7721E-09	9.4302E-09	0	0	3.7721E-09	9.4302E-09	0	0	2.7439E-10	2.6538E-10	3.3607E-09	8.4017E-09	8.4017E-09	2.7726E-08	9.5307E-10	2.9222E-09	2.2662E-10
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	3.5994E-09	3.3027E-08	1.4273E-08	5.3992E-08	1.6197E-08	3.7721E-09	9.4302E-09	0	0	3.7721E-09	9.4302E-09	0	0	2.7439E-10	2.6538E-10	3.3607E-09	8.4017E-09	8.4017E-09	2.7726E-08	9.5307E-10	2.9222E-09	2.2662E-10
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	7.1989E-09	5.8433E-08	1.8166E-08	4.4993E-08	2.3396E-08	2.7348E-08	8.4872E-09	0	0	2.7348E-08	8.4872E-09	0	0	2.4695E-10	2.3884E-10	2.0164E-08	7.5615E-09	4.1168E-08	2.3525E-08	2.9784E-09	2.4352E-09	7.083E-10
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	7.1989E-09	5.8433E-08	1.8166E-08	4.4993E-08	2.3396E-08	2.7348E-08	8.4872E-09	0	0	2.7348E-08	8.4872E-09	0	0	2.4695E-10	2.3884E-10	2.0164E-08	7.5615E-09	4.1168E-08	2.3525E-08	2.9784E-09	2.4352E-09	7.083E-10
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	7.1989E-09	5.8433E-08	1.8166E-08	4.4993E-08	2.3396E-08	2.7348E-08	8.4872E-09	0	0	2.7348E-08	8.4872E-09	0	0	2.4695E-10	2.3884E-10	2.0164E-08	7.5615E-09	4.1168E-08	2.3525E-08	2.9784E-09	2.4352E-09	7.083E-10
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	7.1989E-09	5.8433E-08	1.8166E-08	4.4993E-08	2.3396E-08	2.7348E-08	8.4872E-09	0	0	2.7348E-08	8.4872E-09	0	0	2.4695E-10	2.3884E-10	2.0164E-08	7.5615E-09	4.1168E-08	2.3525E-08	2.9784E-09	2.4352E-09	7.083E-10
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	7.1989E-09	5.8433E-08	1.8166E-08	4.4993E-08	2.3396E-08	2.7348E-08	8.4872E-09	0	0	2.7348E-08	8.4872E-09	0	0	2.4695E-10	2.3884E-10	2.0164E-08	7.5615E-09	4.1168E-08	2.3525E-08	2.9784E-09	2.4352E-09	7.083E-10
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	1.2598E-08	1.6514E-08	3.2439E-08	1.9797E-08	5.2192E-08	9.4302E-09	3.7721E-09	0	0	9.4302E-09	3.7721E-09	0	0	1.0975E-10	1.0615E-10	8.4017E-09	3.3607E-09	2.6045E-08	1.1762E-08	2.6209E-09	1.0958E-09	5.8832E-10
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	1.2598E-08	1.6514E-08	3.2439E-08	1.9797E-08	5.2192E-08	9.4302E-09	3.7721E-09	0	0	9.4302E-09	3.7721E-09	0	0	1.0975E-10	1.0615E-10	8.4017E-09	3.3607E-09	2.6045E-08	1.1762E-08	2.6209E-09	1.0958E-09	5.8832E-10
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	1.2598E-08	1.6514E-08	3.2439E-08	1.9797E-08	5.2192E-08	9.4302E-09	3.7721E-09	0	0	9.4302E-09	3.7721E-09	0	0	1.0975E-10	1.0615E-10	8.4017E-09	3.3607E-09	2.6045E-08	1.1762E-08	2.6209E-09	1.0958E-09	5.8832E-10
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	1.2598E-08	1.6514E-08	3.2439E-08	1.9797E-08	5.2192E-08	9.4302E-09	3.7721E-09	0	0	9.4302E-09	3.7721E-09	0	0	1.0975E-10	1.0615E-10	8.4017E-09	3.3607E-09	2.6045E-08	1.1762E-08	2.6209E		

Appendix C2

Variable Emission Rates for PM10 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22
			Link Length (m)	180	85	120	120	100	-	230	230	-	600	600	-	160	160	120	120	50	50	50			
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300	
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	1.235E-08	3.458E-08	4.041E-08	5.7728E-09	1.976E-08	1.1756E-08	3.8992E-09	2.47E-09	0	0	0	2.47E-09	0	0	2.968E-08	1.484E-08	2.8864E-08	1.7318E-08	2.0776E-08	8.904E-09	5.7728E-09	
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	1.235E-08	3.458E-08	4.041E-08	5.7728E-09	1.976E-08	1.1756E-08	3.8992E-09	2.47E-09	0	0	0	2.47E-09	0	0	2.968E-08	1.484E-08	2.8864E-08	1.7318E-08	2.0776E-08	8.904E-09	5.7728E-09	
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	1.235E-08	3.458E-08	4.041E-08	5.7728E-09	1.976E-08	1.1756E-08	3.8992E-09	2.47E-09	0	0	0	2.47E-09	0	0	2.968E-08	1.484E-08	2.8864E-08	1.7318E-08	2.0776E-08	8.904E-09	5.7728E-09	
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	1.235E-08	3.458E-08	4.041E-08	5.7728E-09	1.976E-08	1.1756E-08	3.8992E-09	2.47E-09	0	0	0	2.47E-09	0	0	2.968E-08	1.484E-08	2.8864E-08	1.7318E-08	2.0776E-08	8.904E-09	5.7728E-09	
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	1.235E-08	3.458E-08	4.041E-08	5.7728E-09	1.976E-08	1.1756E-08	3.8992E-09	2.47E-09	0	0	0	2.47E-09	0	0	2.968E-08	1.484E-08	2.8864E-08	1.7318E-08	2.0776E-08	8.904E-09	5.7728E-09	
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	4.446E-08	1.4079E-07	1.6741E-07	2.3091E-08	7.904E-08	4.3105E-08	1.5597E-08	4.94E-09	2.47E-09	0	0	2.47E-09	4.94E-09	0	0	1.2169E-07	5.6392E-08	1.2123E-07	6.9274E-08	7.7168E-08	3.2648E-08	1.1546E-08
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	4.446E-08	1.4079E-07	1.6741E-07	2.3091E-08	7.904E-08	4.3105E-08	1.5597E-08	4.94E-09	2.47E-09	0	0	2.47E-09	4.94E-09	0	0	1.2169E-07	5.6392E-08	1.2123E-07	6.9274E-08	7.7168E-08	3.2648E-08	1.1546E-08
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	4.446E-08	1.4079E-07	1.6741E-07	2.3091E-08	7.904E-08	4.3105E-08	1.5597E-08	4.94E-09	2.47E-09	0	0	2.47E-09	4.94E-09	0	0	1.2169E-07	5.6392E-08	1.2123E-07	6.9274E-08	7.7168E-08	3.2648E-08	1.1546E-08
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	4.446E-08	1.4079E-07	1.6741E-07	2.3091E-08	7.904E-08	4.3105E-08	1.5597E-08	4.94E-09	2.47E-09	0	0	2.47E-09	4.94E-09	0	0	1.2169E-07	5.6392E-08	1.2123E-07	6.9274E-08	7.7168E-08	3.2648E-08	1.1546E-08
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	1.7043E-07	1.1856E-07	1.4432E-07	1.3855E-07	1.0374E-07	3.1349E-08	9.358E-08	4.94E-09	1.482E-08	0	0	1.482E-08	4.94E-09	0	0	9.7945E-08	2.3744E-07	9.8138E-08	5.311E-07	1.3653E-07	5.3424E-08	2.3091E-08
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	1.7043E-07	1.1856E-07	1.4432E-07	1.3855E-07	1.0374E-07	3.1349E-08	9.358E-08	4.94E-09	1.482E-08	0	0	1.482E-08	4.94E-09	0	0	9.7945E-08	2.3744E-07	9.8138E-08	5.311E-07	1.3653E-07	5.3424E-08	2.3091E-08
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	1.7043E-07	1.1856E-07	1.4432E-07	1.3855E-07	1.0374E-07	3.1349E-08	9.358E-08	4.94E-09	1.482E-08	0	0	1.482E-08	4.94E-09	0	0	9.7945E-08	2.3744E-07	9.8138E-08	5.311E-07	1.3653E-07	5.3424E-08	2.3091E-08
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	1.7043E-07	1.1856E-07	1.4432E-07	1.3855E-07	1.0374E-07	3.1349E-08	9.358E-08	4.94E-09	1.482E-08	0	0	1.482E-08	4.94E-09	0	0	9.7945E-08	2.3744E-07	9.8138E-08	5.311E-07	1.3653E-07	5.3424E-08	2.3091E-08
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	1.7043E-07	1.1856E-07	1.4432E-07	1.3855E-07	1.0374E-07	3.1349E-08	9.358E-08	4.94E-09	1.482E-08	0	0	1.482E-08	4.94E-09	0	0	9.7945E-08	2.3744E-07	9.8138E-08	5.311E-07	1.3653E-07	5.3424E-08	2.3091E-08
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	1.3091E-07	5.681E-08	7.5046E-08	5.7728E-08	4.94E-08	1.5674E-08	4.2891E-08	2.47E-09	7.41E-09	0	0	7.41E-09	2.47E-09	0	0	4.452E-08	1.6918E-07	4.6183E-08	1.7896E-07	3.8584E-08	1.0982E-07	4.041E-08
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	1.3091E-07	5.681E-08	7.5046E-08	5.7728E-08	4.94E-08	1.5674E-08	4.2891E-08	2.47E-09	7.41E-09	0	0	7.41E-09	2.47E-09	0	0	4.452E-08	1.6918E-07	4.6183E-08	1.7896E-07	3.8584E-08	1.0982E-07	4.041E-08
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	1.3091E-07	5.681E-08	7.5046E-08	5.7728E-08	4.94E-08	1.5674E-08	4.2891E-08	2.47E-09	7.41E-09	0	0	7.41E-09	2.47E-09	0	0	4.452E-08	1.6918E-07	4.6183E-08	1.7896E-07	3.8584E-08	1.0982E-07	4.041E-08
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	1.3091E-07	5.681E-08	7.5046E-08	5.7728E-08	4.94E-08	1.5674E-08	4.2891E-08	2.47E-09	7.41E-09	0	0	7.41E-09	2.47E-09	0	0	4.452E-08	1.6918E-07	4.6183E-08	1.7896E-07	3.8584E-08	1.0982E-07	4.041E-08
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	1.3091E-07	5.681E-08	7.5046E-08	5.7728E-08	4.94E-08	1.5674E-08	4.2891E-08	2.47E-09	7.41E-09	0	0	7.41E-09	2.47E-09	0	0	4.452E-08	1.6918E-07	4.6183E-08	1.7896E-07	3.8584E-08</td		

Appendix C2

Variable Emission Rates for PM10 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44	
			Link Length (m)	50	-	-	150	150	90	90	60	320	320	-	-	-	500	500	65	65	-	-	-	-		
			Link Area (m ²)	300	579	567	900	900	540	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751	
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	5.7728E-09	2.7986E-08	1.2252E-08	4.6182E-08	1.1546E-08	2.968E-09	8.904E-09	0	0	2.968E-09	8.904E-09	0	0	2.5908E-10	2.5057E-10	2.47E-09	7.41E-09	7.41E-09	1.976E-08	4.9006E-10	1.5026E-09	1.3606E-09	
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	5.7728E-09	2.7986E-08	1.2252E-08	4.6182E-08	1.1546E-08	2.968E-09	8.904E-09	0	0	2.968E-09	8.904E-09	0	0	2.5908E-10	2.5057E-10	2.47E-09	7.41E-09	7.41E-09	1.976E-08	4.9006E-10	1.5026E-09	1.3606E-09	
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	5.7728E-09	2.7986E-08	1.2252E-08	4.6182E-08	1.1546E-08	2.968E-09	8.904E-09	0	0	2.968E-09	8.904E-09	0	0	2.5908E-10	2.5057E-10	2.47E-09	7.41E-09	7.41E-09	1.976E-08	4.9006E-10	1.5026E-09	1.3606E-09	
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	5.7728E-09	2.7986E-08	1.2252E-08	4.6182E-08	1.1546E-08	2.968E-09	8.904E-09	0	0	2.968E-09	8.904E-09	0	0	2.5908E-10	2.5057E-10	2.47E-09	7.41E-09	7.41E-09	1.976E-08	4.9006E-10	1.5026E-09	1.3606E-09	
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	5.7728E-09	2.7986E-08	1.2252E-08	4.6182E-08	1.1546E-08	2.968E-09	8.904E-09	0	0	2.968E-09	8.904E-09	0	0	2.5908E-10	2.5057E-10	2.47E-09	7.41E-09	7.41E-09	1.976E-08	4.9006E-10	1.5026E-09	1.3606E-09	
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	1.1546E-08	1.0395E-07	4.4923E-08	1.7318E-07	5.1955E-08	1.1872E-08	2.968E-08	0	0	1.1872E-08	2.968E-08	0	0	8.6359E-10	8.3524E-10	9.8801E-09	2.47E-08	2.47E-08	8.151E-08	1.9602E-09	6.0103E-09	2.2481E-09	
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	1.1546E-08	1.0395E-07	4.4923E-08	1.7318E-07	5.1955E-08	1.1872E-08	2.968E-08	0	0	1.1872E-08	2.968E-08	0	0	8.6359E-10	8.3524E-10	9.8801E-09	2.47E-08	2.47E-08	8.151E-08	1.9602E-09	6.0103E-09	2.2481E-09	
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	1.1546E-08	1.0395E-07	4.4923E-08	1.7318E-07	5.1955E-08	1.1872E-08	2.968E-08	0	0	1.1872E-08	2.968E-08	0	0	8.6359E-10	8.3524E-10	9.8801E-09	2.47E-08	2.47E-08	8.151E-08	1.9602E-09	6.0103E-09	2.2481E-09	
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	1.1546E-08	1.0395E-07	4.4923E-08	1.7318E-07	5.1955E-08	1.1872E-08	2.968E-08	0	0	1.1872E-08	2.968E-08	0	0	8.6359E-10	8.3524E-10	9.8801E-09	2.47E-08	2.47E-08	8.151E-08	1.9602E-09	6.0103E-09	2.2481E-09	
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	2.3091E-08	1.8391E-07	5.7174E-08	1.4432E-07	7.5046E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09	
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	2.3091E-08	1.8391E-07	5.7174E-08	1.4432E-07	7.5046E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09	
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	2.3091E-08	1.8391E-07	5.7174E-08	1.4432E-07	7.5046E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09	
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	2.3091E-08	1.8391E-07	5.7174E-08	1.4432E-07	7.5046E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09	
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	2.3091E-08	1.8391E-07	5.7174E-08	1.4432E-07	7.5046E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09	
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	4.041E-08	5.1974E-08	1.021E-07	6.3501E-08	1.6741E-07	2.968E-08	1.1872E-08	0	0	2.968E-08	1.1872E-08	0	0	3.4543E-10	3.3409E-10	2.47E-08	9.8801E-09	7.657E-08	3.458E-08	5.3906E-09	2.2539E-09	3.8773E-09	
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	4.041E-08	5.1974E-08	1.021E-07	6.3501E-08	1.6741E-07	2.968E-08	1.1872E-08	0	0	2.968E-08	1.1872E-08	0	0	3.4543E-10	3.3409E-10	2.47E-08	9.8801E-09	7.657E-08	3.458E-08	5.3906E-09	2.2539E-09	3.8773E-09	
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	4.041E-08	5.1974E-08	1.021E-07	6.3501E-08	1.6741E-07	2.968E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	4.041E-08	5.1974E-08	1.021E-07	6.3501E-08	1.6741E-07	2.968E-08	8.6072E-08	2.6712E-08	0	0	8.6072E-08	2.6712E-08	0	0	7.7723E-10	7.5171E-10	5.928E-08	2.223E-08	1.2103E-07	6.916E-08	6.1257E-09	5.0086E-09	5.8014E-09
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	4.																						

Appendix C2

Variable Emission Rates for PM10 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22	
			Link Length (m)	180	85	120	120	100	-	230	230	-	-	600	600	-	-	160	160	120	120	50	50	50		
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300	300	
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	1.2349E-08	3.4577E-08	4.0407E-08	5.7725E-09	1.9758E-08	1.1755E-08	3.8988E-09	2.4698E-09	0	0	0	2.4698E-09	0	0	2.9678E-08	1.4839E-08	2.8862E-08	1.7317E-08	2.0774E-08	8.9033E-09	5.7725E-09		
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	1.2349E-08	3.4577E-08	4.0407E-08	5.7725E-09	1.9758E-08	1.1755E-08	3.8988E-09	2.4698E-09	0	0	0	2.4698E-09	0	0	2.9678E-08	1.4839E-08	2.8862E-08	1.7317E-08	2.0774E-08	8.9033E-09	5.7725E-09		
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	1.2349E-08	3.4577E-08	4.0407E-08	5.7725E-09	1.9758E-08	1.1755E-08	3.8988E-09	2.4698E-09	0	0	0	2.4698E-09	0	0	2.9678E-08	1.4839E-08	2.8862E-08	1.7317E-08	2.0774E-08	8.9033E-09	5.7725E-09		
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	1.2349E-08	3.4577E-08	4.0407E-08	5.7725E-09	1.9758E-08	1.1755E-08	3.8988E-09	2.4698E-09	0	0	0	2.4698E-09	0	0	2.9678E-08	1.4839E-08	2.8862E-08	1.7317E-08	2.0774E-08	8.9033E-09	5.7725E-09		
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	1.2349E-08	3.4577E-08	4.0407E-08	5.7725E-09	1.9758E-08	1.1755E-08	3.8988E-09	2.4698E-09	0	0	0	2.4698E-09	0	0	2.9678E-08	1.4839E-08	2.8862E-08	1.7317E-08	2.0774E-08	8.9033E-09	5.7725E-09		
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	4.4456E-08	1.4078E-07	1.674E-07	2.309E-08	7.9033E-08	4.3101E-08	1.5595E-08	4.9395E-09	2.4698E-09	0	0	0	2.4698E-09	4.9395E-09	0	0	1.2168E-07	5.6387E-08	1.2122E-07	6.9269E-08	7.7162E-08	3.2645E-08	1.1545E-08
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	4.4456E-08	1.4078E-07	1.674E-07	2.309E-08	7.9033E-08	4.3101E-08	1.5595E-08	4.9395E-09	2.4698E-09	0	0	0	2.4698E-09	4.9395E-09	0	0	1.2168E-07	5.6387E-08	1.2122E-07	6.9269E-08	7.7162E-08	3.2645E-08	1.1545E-08
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	4.4456E-08	1.4078E-07	1.674E-07	2.309E-08	7.9033E-08	4.3101E-08	1.5595E-08	4.9395E-09	2.4698E-09	0	0	0	2.4698E-09	4.9395E-09	0	0	1.2168E-07	5.6387E-08	1.2122E-07	6.9269E-08	7.7162E-08	3.2645E-08	1.1545E-08
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	4.4456E-08	1.4078E-07	1.674E-07	2.309E-08	7.9033E-08	4.3101E-08	1.5595E-08	4.9395E-09	2.4698E-09	0	0	0	2.4698E-09	4.9395E-09	0	0	1.2168E-07	5.6387E-08	1.2122E-07	6.9269E-08	7.7162E-08	3.2645E-08	1.1545E-08
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	1.7041E-07	1.1855E-07	1.4431E-07	1.3854E-07	1.0373E-07	3.1346E-08	9.3572E-08	4.9395E-09	1.4819E-08	0	0	0	1.4819E-08	4.9395E-09	0	0	9.7936E-08	2.3742E-07	9.8132E-08	5.3107E-07	1.3652E-07	5.342E-08	2.309E-08
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	1.7041E-07	1.1855E-07	1.4431E-07	1.3854E-07	1.0373E-07	3.1346E-08	9.3572E-08	4.9395E-09	1.4819E-08	0	0	0	1.4819E-08	4.9395E-09	0	0	9.7936E-08	2.3742E-07	9.8132E-08	5.3107E-07	1.3652E-07	5.342E-08	2.309E-08
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	1.7041E-07	1.1855E-07	1.4431E-07	1.3854E-07	1.0373E-07	3.1346E-08	9.3572E-08	4.9395E-09	1.4819E-08	0	0	0	1.4819E-08	4.9395E-09	0	0	9.7936E-08	2.3742E-07	9.8132E-08	5.3107E-07	1.3652E-07	5.342E-08	2.309E-08
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	1.7041E-07	1.1855E-07	1.4431E-07	1.3854E-07	1.0373E-07	3.1346E-08	9.3572E-08	4.9395E-09	1.4819E-08	0	0	0	1.4819E-08	4.9395E-09	0	0	9.7936E-08	2.3742E-07	9.8132E-08	5.3107E-07	1.3652E-07	5.342E-08	2.309E-08
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	1.7041E-07	1.1855E-07	1.4431E-07	1.3854E-07	1.0373E-07	3.1346E-08	9.3572E-08	4.9395E-09	1.4819E-08	0	0	0	1.4819E-08	4.9395E-09	0	0	9.7936E-08	2.3742E-07	9.8132E-08	5.3107E-07	1.3652E-07	5.342E-08	2.309E-08
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	1.309E-07	5.6680E-08	7.5042E-08	5.7725E-08	4.9395E-08	1.5673E-08	4.2887E-08	2.4698E-08	7.4093E-09	0	0	0	7.4093E-09	2.4698E-09	0	0	4.4516E-08	1.6916E-07	4.618E-08	1.7895E-07	3.8581E-08	1.0981E-07	4.0407E-08
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	1.309E-07	5.6680E-08	7.5042E-08	5.7725E-08	4.9395E-08	1.5673E-08	4.2887E-08	2.4698E-08	7.4093E-09	0	0	0	7.4093E-09	2.4698E-09	0	0	4.4516E-08	1.6916E-07	4.618E-08	1.7895E-07	3.8581E-08	1.0981E-07	4.0407E-08
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	1.309E-07	5.6680E-08	7.5042E-08	5.7725E-08	4.9395E-08	1.5673E-08	4.2887E-08	2.4698E-08	7.4093E-09	0	0	0	7.4093E-09	2.4698E-09	0	0	4.4516E-08	1.6916E-07	4.618E-08	1.7895E-07	3.8581E-08	1.0981E-07	4.0407E-08
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	1.309E-07	5.6680E-08	7.5042E-08	5.7725E-08	4.9395E-08	1.5673E-08	4.2887E-08	2.4698E-08	7.4093E-09	0	0	0	7.4093E-09	2.4698E-09	0	0	4.4516E-08	1.6916E-07	4.618E-08	1.7895E-07	3.8581E-08	1.0981E-07	4.0407E-08
Summer, hour																										

Appendix C2

Variable Emission Rates for PM10 used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44
			Link Length (m)	50	-	-	150	150	90	60	60	320	320	-	-	500	500	65	65	-	-	-	-	-	
			Link Area (m ²)	300	579	567	900	900	540	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	5.7725E-09	2.7984E-08	1.2251E-08	4.618E-08	1.1545E-08	2.9678E-09	8.9033E-09	0	0	2.9678E-09	8.9033E-09	0	0	2.5905E-10	2.5055E-10	2.4698E-09	7.4093E-09	7.4093E-09	1.9758E-08	4.8997E-10	1.5023E-09	1.9766E-10
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	5.7725E-09	2.7984E-08	1.2251E-08	4.618E-08	1.1545E-08	2.9678E-09	8.9033E-09	0	0	2.9678E-09	8.9033E-09	0	0	2.5905E-10	2.5055E-10	2.4698E-09	7.4093E-09	7.4093E-09	1.9758E-08	4.8997E-10	1.5023E-09	1.9766E-10
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	5.7725E-09	2.7984E-08	1.2251E-08	4.618E-08	1.1545E-08	2.9678E-09	8.9033E-09	0	0	2.9678E-09	8.9033E-09	0	0	2.5905E-10	2.5055E-10	2.4698E-09	7.4093E-09	7.4093E-09	1.9758E-08	4.8997E-10	1.5023E-09	1.9766E-10
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	5.7725E-09	2.7984E-08	1.2251E-08	4.618E-08	1.1545E-08	2.9678E-09	8.9033E-09	0	0	2.9678E-09	8.9033E-09	0	0	2.5905E-10	2.5055E-10	2.4698E-09	7.4093E-09	7.4093E-09	1.9758E-08	4.8997E-10	1.5023E-09	1.9766E-10
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	5.7725E-09	2.7984E-08	1.2251E-08	4.618E-08	1.1545E-08	2.9678E-09	8.9033E-09	0	0	2.9678E-09	8.9033E-09	0	0	2.5905E-10	2.5055E-10	2.4698E-09	7.4093E-09	7.4093E-09	1.9758E-08	4.8997E-10	1.5023E-09	1.9766E-10
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	1.1545E-08	1.0394E-07	4.4919E-08	1.7317E-07	5.1952E-08	1.1871E-08	2.9678E-08	0	0	1.1871E-08	2.9678E-08	0	0	8.6351E-10	8.3517E-10	9.8791E-09	2.4698E-08	2.4698E-08	8.1503E-08	1.9599E-09	6.0092E-09	2.5519E-10
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	1.1545E-08	1.0394E-07	4.4919E-08	1.7317E-07	5.1952E-08	1.1871E-08	2.9678E-08	0	0	1.1871E-08	2.9678E-08	0	0	8.6351E-10	8.3517E-10	9.8791E-09	2.4698E-08	2.4698E-08	8.1503E-08	1.9599E-09	6.0092E-09	2.5519E-10
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	1.1545E-08	1.0394E-07	4.4919E-08	1.7317E-07	5.1952E-08	1.1871E-08	2.9678E-08	0	0	1.1871E-08	2.9678E-08	0	0	8.6351E-10	8.3517E-10	9.8791E-09	2.4698E-08	2.4698E-08	8.1503E-08	1.9599E-09	6.0092E-09	2.5519E-10
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	1.1545E-08	1.0394E-07	4.4919E-08	1.7317E-07	5.1952E-08	1.1871E-08	2.9678E-08	0	0	1.1871E-08	2.9678E-08	0	0	8.6351E-10	8.3517E-10	9.8791E-09	2.4698E-08	2.4698E-08	8.1503E-08	1.9599E-09	6.0092E-09	2.5519E-10
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	2.309E-08	1.8389E-07	5.7169E-08	1.4431E-07	7.5042E-08	8.6065E-08	2.671E-08	0	0	8.6065E-08	2.671E-08	0	0	7.7716E-10	7.5165E-10	5.9275E-08	2.2228E-08	1.2102E-07	6.9154E-08	6.1246E-09	5.0076E-09	7.9766E-10
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	2.309E-08	1.8389E-07	5.7169E-08	1.4431E-07	7.5042E-08	8.6065E-08	2.671E-08	0	0	8.6065E-08	2.671E-08	0	0	7.7716E-10	7.5165E-10	5.9275E-08	2.2228E-08	1.2102E-07	6.9154E-08	6.1246E-09	5.0076E-09	7.9766E-10
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	2.309E-08	1.8389E-07	5.7169E-08	1.4431E-07	7.5042E-08	8.6065E-08	2.671E-08	0	0	8.6065E-08	2.671E-08	0	0	7.7716E-10	7.5165E-10	5.9275E-08	2.2228E-08	1.2102E-07	6.9154E-08	6.1246E-09	5.0076E-09	7.9766E-10
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	2.309E-08	1.8389E-07	5.7169E-08	1.4431E-07	7.5042E-08	8.6065E-08	2.671E-08	0	0	8.6065E-08	2.671E-08	0	0	7.7716E-10	7.5165E-10	5.9275E-08	2.2228E-08	1.2102E-07	6.9154E-08	6.1246E-09	5.0076E-09	7.9766E-10
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	2.309E-08	1.8389E-07	5.7169E-08	1.4431E-07	7.5042E-08	8.6065E-08	2.671E-08	0	0	8.6065E-08	2.671E-08	0	0	7.7716E-10	7.5165E-10	5.9275E-08	2.2228E-08	1.2102E-07	6.9154E-08	6.1246E-09	5.0076E-09	7.9766E-10
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	4.0407E-08	5.197E-08	1.0209E-07	6.3497E-08	1.674E-07	2.9678E-08	1.1871E-08	0	0	2.9678E-08	1.1871E-08	0	0	3.454E-10	3.3407E-10	2.4698E-08	9.8791E-09	9.7653E-08	3.4577E-08	5.3896E-09	2.2534E-09	6.6253E-10
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	4.0407E-08	5.197E-08	1.0209E-07	6.3497E-08	1.674E-07	2.9678E-08	1.1871E-08	0	0	2.9678E-08	1.1871E-08	0	0	3.454E-10	3.3407E-10	2.4698E-08	9.8791E-09	9.7653E-08	3.4577E-08	5.3896E-09	2.2534E-09	6.6253E-10
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	4.0407E-08	5.197E-08	1.0209E-07	6.3497E-08	1.674E-07	2.9678E-08	1.1871E-08	0	0	2.9678E-08	1.1871E-08	0	0	3.454E-10	3.3407E-10	2.4698E-08	9.8791E-09	9.7653E-08	3.4577E-08	5.3896E-09	2.2534E-09	6.6253E-10
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	4.0407E-08	5.197E-08	1.0209E-07	6.3497E-08	1.674E-07	2.9678E-08	1.1871E-08	0	0	2.9678E-08	1.1871E-08	0	0	3.454E-10	3.3407E-10	2.4698E-08	9.8791E-09	9.7653E-08	3.4577E-08	5.3896E-09	2.	

Appendix C3

Variable Emission Rates for NO₂ used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22	
			Link Length (m)	180	85	120	120	100	-	230	230	-	600	600	-	160	160	120	120	50	50	50				
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300		
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	1.1108E-08	3.1104E-08	3.1164E-08	4.452E-09	1.7773E-08	9.9104E-09	3.2871E-09	2.2217E-09	0	0	0	2.2217E-09	0	0	2.5021E-08	1.251E-08	2.226E-08	1.3356E-08	1.7515E-08	7.5062E-09	4.452E-09		
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	1.1108E-08	3.1104E-08	3.1164E-08	4.452E-09	1.7773E-08	9.9104E-09	3.2871E-09	2.2217E-09	0	0	0	2.2217E-09	0	0	2.5021E-08	1.251E-08	2.226E-08	1.3356E-08	1.7515E-08	7.5062E-09	4.452E-09		
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	1.1108E-08	3.1104E-08	3.1164E-08	4.452E-09	1.7773E-08	9.9104E-09	3.2871E-09	2.2217E-09	0	0	0	2.2217E-09	0	0	2.5021E-08	1.251E-08	2.226E-08	1.3356E-08	1.7515E-08	7.5062E-09	4.452E-09		
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	1.1108E-08	3.1104E-08	3.1164E-08	4.452E-09	1.7773E-08	9.9104E-09	3.2871E-09	2.2217E-09	0	0	0	2.2217E-09	0	0	2.5021E-08	1.251E-08	2.226E-08	1.3356E-08	1.7515E-08	7.5062E-09	4.452E-09		
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	1.1108E-08	3.1104E-08	3.1164E-08	4.452E-09	1.7773E-08	9.9104E-09	3.2871E-09	2.2217E-09	0	0	0	2.2217E-09	0	0	2.5021E-08	1.251E-08	2.226E-08	1.3356E-08	1.7515E-08	7.5062E-09	4.452E-09		
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	3.999E-08	1.2664E-07	1.2911E-07	1.7808E-08	7.1094E-08	3.6338E-08	1.3148E-08	4.4434E-09	2.2217E-09	0	0	0	2.2217E-09	4.4434E-09	0	0	1.0259E-07	4.754E-08	9.3493E-08	5.3424E-08	6.5054E-08	2.7523E-08	8.9041E-09
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	3.999E-08	1.2664E-07	1.2911E-07	1.7808E-08	7.1094E-08	3.6338E-08	1.3148E-08	4.4434E-09	2.2217E-09	0	0	0	2.2217E-09	4.4434E-09	0	0	1.0259E-07	4.754E-08	9.3493E-08	5.3424E-08	6.5054E-08	2.7523E-08	8.9041E-09
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	3.999E-08	1.2664E-07	1.2911E-07	1.7808E-08	7.1094E-08	3.6338E-08	1.3148E-08	4.4434E-09	2.2217E-09	0	0	0	2.2217E-09	4.4434E-09	0	0	1.0259E-07	4.754E-08	9.3493E-08	5.3424E-08	6.5054E-08	2.7523E-08	8.9041E-09
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	3.999E-08	1.2664E-07	1.2911E-07	1.7808E-08	7.1094E-08	3.6338E-08	1.3148E-08	4.4434E-09	2.2217E-09	0	0	0	2.2217E-09	4.4434E-09	0	0	1.0259E-07	4.754E-08	9.3493E-08	5.3424E-08	6.5054E-08	2.7523E-08	8.9041E-09
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	1.533E-07	1.0664E-07	1.113E-07	1.0685E-07	9.3311E-08	2.6428E-08	7.8889E-08	4.4434E-09	1.333E-08	0	0	0	1.333E-08	4.4434E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	1.533E-07	1.0664E-07	1.113E-07	1.0685E-07	9.3311E-08	2.6428E-08	7.8889E-08	4.4434E-09	1.333E-08	0	0	0	1.333E-08	4.4434E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	1.533E-07	1.0664E-07	1.113E-07	1.0685E-07	9.3311E-08	2.6428E-08	7.8889E-08	4.4434E-09	1.333E-08	0	0	0	1.333E-08	4.4434E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	1.533E-07	1.0664E-07	1.113E-07	1.0685E-07	9.3311E-08	2.6428E-08	7.8889E-08	4.4434E-09	1.333E-08	0	0	0	1.333E-08	4.4434E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	1.533E-07	1.0664E-07	1.113E-07	1.0685E-07	9.3311E-08	2.6428E-08	7.8889E-08	4.4434E-09	1.333E-08	0	0	0	1.333E-08	4.4434E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	1.1775E-07	5.1099E-08	5.7877E-08	4.452E-08	4.4434E-08	1.3214E-08	3.6158E-08	2.2217E-09	6.665E-09	0	0	0	6.6651E-09	2.2217E-09	0	0	3.7531E-08	1.4262E-07	3.5616E-08	1.3801E-07	3.2527E-08	9.2577E-08	3.1164E-08
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	1.1775E-07	5.1099E-08	5.7877E-08	4.452E-08	4.4434E-08	1.3214E-08	3.6158E-08	2.2217E-09	6.665E-09	0	0	0	6.6651E-09	2.2217E-09	0	0	3.7531E-08	1.4262E-07	3.5616E-08	1.3801E-07	3.2527E-08	9.2577E-08	3.1164E-08
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	1.1775E-07	5.1099E-08	5.7877E-08	4.452E-08	4.4434E-08	1.3214E-08	3.6158E-08	2.2217E-09	6.665E-09	0	0	0	6.6651E-09	2.2217E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	1.1775E-07	5.1099E-08	5.7877E-08	4.452E-08	4.4434E-08	1.3214E-08	3.6158E-08	2.2217E-09	6.665E-09	0	0	0	6.6651E-09	2.2217E-09	0	0	8.2569E-08	2.0017E-07	7.5685E-08	4.0959E-07	1.151E-07	4.5037E-08	1.7808E-08
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	1.1775E-07	5.1099E-08	5.7877E-08</td																				

Appendix C3

Variable Emission Rates for NO₂ used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44
			Link Length (m)	50	-	-	150	150	90	60	60	320	320	-	-	500	500	65	65	-	-	-	-	-	
			Link Area (m ²)	300	579	567	900	900	540	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751
Winter, hour 1	12:00 AM	12:59 AM	R4_Jan2024_ON	4.452E-09	2.3593E-08	1.0328E-08	3.5616E-08	8.9041E-09	2.5021E-09	7.5063E-09	0	0	2.5021E-09	7.5062E-09	0	0	2.1841E-10	2.1124E-10	2.2217E-09	6.6651E-09	6.6651E-09	1.7773E-08	7.3382E-10	2.25E-09	1.4641E-09
Winter, hour 2	1:00 AM	1:59 AM	R4_Jan2024_ON	4.452E-09	2.3593E-08	1.0328E-08	3.5616E-08	8.9041E-09	2.5021E-09	7.5063E-09	0	0	2.5021E-09	7.5062E-09	0	0	2.1841E-10	2.1124E-10	2.2217E-09	6.6651E-09	6.6651E-09	1.7773E-08	7.3382E-10	2.25E-09	1.4641E-09
Winter, hour 3	2:00 AM	2:59 AM	R4_Jan2024_ON	4.452E-09	2.3593E-08	1.0328E-08	3.5616E-08	8.9041E-09	2.5021E-09	7.5063E-09	0	0	2.5021E-09	7.5062E-09	0	0	2.1841E-10	2.1124E-10	2.2217E-09	6.6651E-09	6.6651E-09	1.7773E-08	7.3382E-10	2.25E-09	1.4641E-09
Winter, hour 4	3:00 AM	3:59 AM	R4_Jan2024_ON	4.452E-09	2.3593E-08	1.0328E-08	3.5616E-08	8.9041E-09	2.5021E-09	7.5063E-09	0	0	2.5021E-09	7.5062E-09	0	0	2.1841E-10	2.1124E-10	2.2217E-09	6.6651E-09	6.6651E-09	1.7773E-08	7.3382E-10	2.25E-09	1.4641E-09
Winter, hour 5	4:00 AM	4:59 AM	R4_Jan2024_ON	4.452E-09	2.3593E-08	1.0328E-08	3.5616E-08	8.9041E-09	2.5021E-09	7.5063E-09	0	0	2.5021E-09	7.5062E-09	0	0	2.1841E-10	2.1124E-10	2.2217E-09	6.6651E-09	6.6651E-09	1.7773E-08	7.3382E-10	2.25E-09	1.4641E-09
Winter, hour 6	5:00 AM	5:59 AM	R1_Jan2024_AM	8.9041E-09	8.7631E-08	3.7871E-08	1.3356E-07	4.0068E-08	1.0008E-08	2.5021E-08	0	0	1.0008E-08	2.5021E-08	0	0	7.2802E-10	7.0412E-10	8.8867E-09	2.2217E-08	2.2217E-08	7.3316E-08	2.9353E-09	8.9999E-09	2.0002E-09
Winter, hour 7	6:00 AM	6:59 AM	R1_Jan2024_AM	8.9041E-09	8.7631E-08	3.7871E-08	1.3356E-07	4.0068E-08	1.0008E-08	2.5021E-08	0	0	1.0008E-08	2.5021E-08	0	0	7.2802E-10	7.0412E-10	8.8867E-09	2.2217E-08	2.2217E-08	7.3316E-08	2.9353E-09	8.9999E-09	2.0002E-09
Winter, hour 8	7:00 AM	7:59 AM	R1_Jan2024_AM	8.9041E-09	8.7631E-08	3.7871E-08	1.3356E-07	4.0068E-08	1.0008E-08	2.5021E-08	0	0	1.0008E-08	2.5021E-08	0	0	7.2802E-10	7.0412E-10	8.8867E-09	2.2217E-08	2.2217E-08	7.3316E-08	2.9353E-09	8.9999E-09	2.0002E-09
Winter, hour 9	8:00 AM	8:59 AM	R1_Jan2024_AM	8.9041E-09	8.7631E-08	3.7871E-08	1.3356E-07	4.0068E-08	1.0008E-08	2.5021E-08	0	0	1.0008E-08	2.5021E-08	0	0	7.2802E-10	7.0412E-10	8.8867E-09	2.2217E-08	2.2217E-08	7.3316E-08	2.9353E-09	8.9999E-09	2.0002E-09
Winter, hour 10	9:00 AM	9:59 AM	R2_Jan2024_MD	1.7808E-08	1.5504E-07	4.8199E-08	1.113E-07	5.7876E-08	7.256E-08	2.2519E-08	0	0	7.256E-08	2.2519E-08	0	0	6.5521E-10	6.3371E-10	5.332E-08	1.9995E-08	1.0886E-07	6.2207E-08	9.1728E-09	7.4999E-09	6.1386E-09
Winter, hour 11	10:00 AM	10:59 AM	R2_Jan2024_MD	1.7808E-08	1.5504E-07	4.8199E-08	1.113E-07	5.7876E-08	7.256E-08	2.2519E-08	0	0	7.256E-08	2.2519E-08	0	0	6.5521E-10	6.3371E-10	5.332E-08	1.9995E-08	1.0886E-07	6.2207E-08	9.1728E-09	7.4999E-09	6.1386E-09
Winter, hour 12	11:00 AM	11:59 AM	R2_Jan2024_MD	1.7808E-08	1.5504E-07	4.8199E-08	1.113E-07	5.7876E-08	7.256E-08	2.2519E-08	0	0	7.256E-08	2.2519E-08	0	0	6.5521E-10	6.3371E-10	5.332E-08	1.9995E-08	1.0886E-07	6.2207E-08	9.1728E-09	7.4999E-09	6.1386E-09
Winter, hour 13	12:00 PM	12:59 PM	R2_Jan2024_MD	1.7808E-08	1.5504E-07	4.8199E-08	1.113E-07	5.7876E-08	7.256E-08	2.2519E-08	0	0	7.256E-08	2.2519E-08	0	0	6.5521E-10	6.3371E-10	5.332E-08	1.9995E-08	1.0886E-07	6.2207E-08	9.1728E-09	7.4999E-09	6.1386E-09
Winter, hour 14	1:00 PM	1:59 PM	R2_Jan2024_MD	1.7808E-08	1.5504E-07	4.8199E-08	1.113E-07	5.7876E-08	7.256E-08	2.2519E-08	0	0	7.256E-08	2.2519E-08	0	0	6.5521E-10	6.3371E-10	5.332E-08	1.9995E-08	1.0886E-07	6.2207E-08	9.1728E-09	7.4999E-09	6.1386E-09
Winter, hour 15	2:00 PM	2:59 PM	R3_Jan2024_PM	3.1164E-08	4.3815E-08	8.6069E-08	4.8972E-08	1.2911E-07	2.5021E-08	1.0008E-08	0	0	2.5021E-08	1.0008E-08	0	0	2.9121E-10	2.8165E-10	2.8867E-09	8.8872E-08	3.1104E-08	8.072E-09	3.375E-09	5.0566E-09	
Winter, hour 16	3:00 PM	3:59 PM	R3_Jan2024_PM	3.1164E-08	4.3815E-08	8.6069E-08	4.8972E-08	1.2911E-07	2.5021E-08	1.0008E-08	0	0	2.5021E-08	1.0008E-08	0	0	2.9121E-10	2.8165E-10	2.8867E-09	8.8872E-08	3.1104E-08	8.072E-09	3.375E-09	5.0566E-09	
Winter, hour 17	4:00 PM	4:59 PM	R3_Jan2024_PM	3.1164E-08	4.3815E-08	8.6069E-08	4.8972E-08	1.2911E-07	2.5021E-08	1.0008E-08	0	0	2.5021E-08	1.0008E-08	0	0	2.9121E-10	2.8165E-10	2.8867E-09	8.8872E-08	3.1104E-08	8.072E-09	3.375E-09	5.0566E-09	
Winter, hour 18	5:00 PM	5:59 PM	R3_Jan2024_PM	3.1164E-08	4.3815E-08	8.6069E-08	4.8972E-08	1.2911E-07	2.5021E-08	1.0008E-08	0	0	2.5021E-08	1.0008E-08	0	0	2.9121E-10	2.8165E-10	2.8867E-09	8.8872E-08	3.1104E-08	8.072E-09	3.375E-09	5.0566E-09	
Winter, hour 19	6:00 PM	6:59 PM	R3_Jan2024_PM	3.11																					

Appendix C3

Variable Emission Rates for NO₂ used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 1	Link 2	Link 3	Link 4	Link 5	Link 6	Link 7	Link 8	Link 9	Link 10	Link 11	Link 12	Link 13	Link 14	Link 15	Link 16	Link 17	Link 18	Link 19	Link 20	Link 21	Link 22	
			Link Length (m)	180	85	120	120	100	-	230	230	-	-	600	600	-	-	160	160	120	120	50	50	50		
			Link Area (m ²)	1080	510	720	720	600	1954	1964	1380	1380	1479	1466	3600	3600	1845	1824	960	960	720	720	300	300	300	
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	9.3098E-09	2.6067E-08	2.6435E-08	3.7765E-09	1.4896E-08	8.3158E-09	2.7582E-09	1.862E-09	0	0	0	0	1.862E-09	0	0	2.0995E-08	1.0498E-08	1.8882E-08	1.1329E-08	1.4696E-08	6.2985E-09	3.7765E-09	
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	9.3098E-09	2.6067E-08	2.6435E-08	3.7765E-09	1.4896E-08	8.3158E-09	2.7582E-09	1.862E-09	0	0	0	0	1.862E-09	0	0	2.0995E-08	1.0498E-08	1.8882E-08	1.1329E-08	1.4696E-08	6.2985E-09	3.7765E-09	
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	9.3098E-09	2.6067E-08	2.6435E-08	3.7765E-09	1.4896E-08	8.3158E-09	2.7582E-09	1.862E-09	0	0	0	0	1.862E-09	0	0	2.0995E-08	1.0498E-08	1.8882E-08	1.1329E-08	1.4696E-08	6.2985E-09	3.7765E-09	
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	9.3098E-09	2.6067E-08	2.6435E-08	3.7765E-09	1.4896E-08	8.3158E-09	2.7582E-09	1.862E-09	0	0	0	0	1.862E-09	0	0	2.0995E-08	1.0498E-08	1.8882E-08	1.1329E-08	1.4696E-08	6.2985E-09	3.7765E-09	
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	9.3098E-09	2.6067E-08	2.6435E-08	3.7765E-09	1.4896E-08	8.3158E-09	2.7582E-09	1.862E-09	0	0	0	0	1.862E-09	0	0	2.0995E-08	1.0498E-08	1.8882E-08	1.1329E-08	1.4696E-08	6.2985E-09	3.7765E-09	
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	3.3481E-08	1.0602E-07	1.099E-07	1.5159E-08	5.9521E-08	3.0479E-08	1.1028E-08	3.7201E-09	1.86E-09	0	0	0	1.86E-09	3.7201E-09	0	0	8.6044E-08	3.9874E-08	7.9585E-08	4.5477E-08	5.4565E-08	2.3085E-08	7.5795E-09
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	3.3481E-08	1.0602E-07	1.099E-07	1.5159E-08	5.9521E-08	3.0479E-08	1.1028E-08	3.7201E-09	1.86E-09	0	0	0	1.86E-09	3.7201E-09	0	0	8.6044E-08	3.9874E-08	7.9585E-08	4.5477E-08	5.4565E-08	2.3085E-08	7.5795E-09
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	3.3481E-08	1.0602E-07	1.099E-07	1.5159E-08	5.9521E-08	3.0479E-08	1.1028E-08	3.7201E-09	1.86E-09	0	0	0	1.86E-09	3.7201E-09	0	0	8.6044E-08	3.9874E-08	7.9585E-08	4.5477E-08	5.4565E-08	2.3085E-08	7.5795E-09
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	3.3481E-08	1.0602E-07	1.099E-07	1.5159E-08	5.9521E-08	3.0479E-08	1.1028E-08	3.7201E-09	1.86E-09	0	0	0	1.86E-09	3.7201E-09	0	0	8.6044E-08	3.9874E-08	7.9585E-08	4.5477E-08	5.4565E-08	2.3085E-08	7.5795E-09
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	1.3031E-07	9.0652E-08	9.7978E-08	9.4059E-08	7.932E-08	2.2564E-08	6.7357E-08	3.7772E-09	1.1332E-08	0	0	0	1.1331E-08	3.7772E-09	0	0	7.0498E-08	1.709E-07	6.6625E-08	3.6056E-07	9.827E-08	3.8453E-08	1.5676E-08
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	1.3031E-07	9.0652E-08	9.7978E-08	9.4059E-08	7.932E-08	2.2564E-08	6.7357E-08	3.7772E-09	1.1332E-08	0	0	0	1.1331E-08	3.7772E-09	0	0	7.0498E-08	1.709E-07	6.6625E-08	3.6056E-07	9.827E-08	3.8453E-08	1.5676E-08
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	1.3031E-07	9.0652E-08	9.7978E-08	9.4059E-08	7.932E-08	2.2564E-08	6.7357E-08	3.7772E-09	1.1332E-08	0	0	0	1.1331E-08	3.7772E-09	0	0	7.0498E-08	1.709E-07	6.6625E-08	3.6056E-07	9.827E-08	3.8453E-08	1.5676E-08
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	1.3031E-07	9.0652E-08	9.7978E-08	9.4059E-08	7.932E-08	2.2564E-08	6.7357E-08	3.7772E-09	1.1332E-08	0	0	0	1.1331E-08	3.7772E-09	0	0	7.0498E-08	1.709E-07	6.6625E-08	3.6056E-07	9.827E-08	3.8453E-08	1.5676E-08
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	1.3031E-07	9.0652E-08	9.7978E-08	9.4059E-08	7.932E-08	2.2564E-08	6.7357E-08	3.7772E-09	1.1332E-08	0	0	0	1.1331E-08	3.7772E-09	0	0	7.0498E-08	1.709E-07	6.6625E-08	3.6056E-07	9.827E-08	3.8453E-08	1.5676E-08
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	1.0101E-07	4.3835E-08	5.1603E-08	3.9694E-08	3.8117E-08	1.1391E-08	3.117E-08	9.1059E-09	5.7176E-09	0	0	0	5.7176E-09	1.9059E-09	0	0	3.2355E-08	1.2295E-07	3.1756E-08	1.2305E-07	2.8041E-08	7.9808E-08	2.7786E-08
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	1.0101E-07	4.3835E-08	5.1603E-08	3.9694E-08	3.8117E-08	1.1391E-08	3.117E-08	9.1059E-09	5.7176E-09	0	0	0	5.7176E-09	1.9059E-09	0	0	3.2355E-08	1.2295E-07	3.1756E-08	1.2305E-07	2.8041E-08	7.9808E-08	2.7786E-08
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	1.0101E-07	4.3835E-08	5.1603E-08	3.9694E-08	3.8117E-08	1.1391E-08	3.117E-08	9.1059E-09	5.7176E-09	0	0	0	5.7176E-09	1.9059E-09	0	0	3.2355E-08	1.2295E-07	3.1756E-08	1.2305E-07	2.8041E-08	7.9808E-08	2.7786E-08
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	1.0101E-07	4.3835E-08	5.1603E-08	3.9694E-08	3.8117E-08	1.1391E-08	3.117E-08	9.1059E-09	5.7176E-09	0	0	0	5.7176E-09	1.9059E-09	0	0	3.2355E-08	1.2295E-07	3.1756E-08	1.2305E-07	2.8041E-08	7.9808E-08	2.7786E-08</

Appendix C3

Variable Emission Rates for NO₂ used in AERMOD Mobile Source Input

Proposed Redevelopment Project

1241 W Division Street - Chicago, Illinois

Period	Start Time	End Time	Run#	Link 23	Link 24	Link 25	Link 26	Link 27	Link 28	Link 29	Link 30	Link 31	Link 32	Link 33	Link 34	Link 35	Link 36	Link 37	Link 38	Link 39	Link 40	Link 41	Link 42	Link 43	Link 44
			Link Length (m)	50	-	-	150	150	90	60	60	320	320	-	-	500	500	65	65	-	-	-	-	-	
			Link Area (m ²)	300	579	567	900	900	540	360	360	1920	1920	1121	1178	18559	19189	3000	3000	390	390	18294	17899	46751	
Summer, hour 1	12:00 AM	12:59 AM	R12_Jul2024_ON	3.7765E-09	1.9797E-08	8.6665E-09	3.0212E-08	7.553E-09	2.0995E-09	6.2985E-09	0	0	2.0995E-09	6.2985E-09	0	0	1.8326E-10	1.7725E-10	1.862E-09	5.5859E-09	5.5859E-09	1.4896E-08	6.0664E-10	1.86E-09	1.3402E-09
Summer, hour 2	1:00 AM	1:59 AM	R12_Jul2024_ON	3.7765E-09	1.9797E-08	8.6665E-09	3.0212E-08	7.553E-09	2.0995E-09	6.2985E-09	0	0	2.0995E-09	6.2985E-09	0	0	1.8326E-10	1.7725E-10	1.862E-09	5.5859E-09	5.5859E-09	1.4896E-08	6.0664E-10	1.86E-09	1.3402E-09
Summer, hour 3	2:00 AM	2:59 AM	R12_Jul2024_ON	3.7765E-09	1.9797E-08	8.6665E-09	3.0212E-08	7.553E-09	2.0995E-09	6.2985E-09	0	0	2.0995E-09	6.2985E-09	0	0	1.8326E-10	1.7725E-10	1.862E-09	5.5859E-09	5.5859E-09	1.4896E-08	6.0664E-10	1.86E-09	1.3402E-09
Summer, hour 4	3:00 AM	3:59 AM	R12_Jul2024_ON	3.7765E-09	1.9797E-08	8.6665E-09	3.0212E-08	7.553E-09	2.0995E-09	6.2985E-09	0	0	2.0995E-09	6.2985E-09	0	0	1.8326E-10	1.7725E-10	1.862E-09	5.5859E-09	5.5859E-09	1.4896E-08	6.0664E-10	1.86E-09	1.3402E-09
Summer, hour 5	4:00 AM	4:59 AM	R12_Jul2024_ON	3.7765E-09	1.9797E-08	8.6665E-09	3.0212E-08	7.553E-09	2.0995E-09	6.2985E-09	0	0	2.0995E-09	6.2985E-09	0	0	1.8326E-10	1.7725E-10	1.862E-09	5.5859E-09	5.5859E-09	1.4896E-08	6.0664E-10	1.86E-09	1.3402E-09
Summer, hour 6	5:00 AM	5:59 AM	R9_Jul2024_AM	7.5795E-09	7.35E-08	3.1764E-08	1.1369E-07	3.4108E-08	8.3945E-09	2.0986E-08	0	0	8.3945E-09	2.0986E-08	0	0	6.1063E-10	5.9058E-10	7.4401E-09	1.86E-08	1.86E-08	6.1381E-08	2.4294E-09	7.4487E-09	1.7995E-09
Summer, hour 7	6:00 AM	6:59 AM	R9_Jul2024_AM	7.5795E-09	7.35E-08	3.1764E-08	1.1369E-07	3.4108E-08	8.3945E-09	2.0986E-08	0	0	8.3945E-09	2.0986E-08	0	0	6.1063E-10	5.9058E-10	7.4401E-09	1.86E-08	1.86E-08	6.1381E-08	2.4294E-09	7.4487E-09	1.7995E-09
Summer, hour 8	7:00 AM	7:59 AM	R9_Jul2024_AM	7.5795E-09	7.35E-08	3.1764E-08	1.1369E-07	3.4108E-08	8.3945E-09	2.0986E-08	0	0	8.3945E-09	2.0986E-08	0	0	6.1063E-10	5.9058E-10	7.4401E-09	1.86E-08	1.86E-08	6.1381E-08	2.4294E-09	7.4487E-09	1.7995E-09
Summer, hour 9	8:00 AM	8:59 AM	R9_Jul2024_AM	7.5795E-09	7.35E-08	3.1764E-08	1.1369E-07	3.4108E-08	8.3945E-09	2.0986E-08	0	0	8.3945E-09	2.0986E-08	0	0	6.1063E-10	5.9058E-10	7.4401E-09	1.86E-08	1.86E-08	6.1381E-08	2.4294E-09	7.4487E-09	1.7995E-09
Summer, hour 10	9:00 AM	9:59 AM	R10_Jul2024_MD	1.5676E-08	1.3237E-07	4.1153E-08	9.7978E-08	5.0948E-08	6.1953E-08	1.9227E-08	0	0	6.1953E-08	1.9227E-08	0	0	5.5943E-10	5.4106E-10	4.5326E-08	1.6997E-08	9.2541E-08	5.288E-08	7.788E-09	6.3677E-09	5.5028E-09
Summer, hour 11	10:00 AM	10:59 AM	R10_Jul2024_MD	1.5676E-08	1.3237E-07	4.1153E-08	9.7978E-08	5.0948E-08	6.1953E-08	1.9227E-08	0	0	6.1953E-08	1.9227E-08	0	0	5.5943E-10	5.4106E-10	4.5326E-08	1.6997E-08	9.2541E-08	5.288E-08	7.788E-09	6.3677E-09	5.5028E-09
Summer, hour 12	11:00 AM	11:59 AM	R10_Jul2024_MD	1.5676E-08	1.3237E-07	4.1153E-08	9.7978E-08	5.0948E-08	6.1953E-08	1.9227E-08	0	0	6.1953E-08	1.9227E-08	0	0	5.5943E-10	5.4106E-10	4.5326E-08	1.6997E-08	9.2541E-08	5.288E-08	7.788E-09	6.3677E-09	5.5028E-09
Summer, hour 13	12:00 PM	12:59 PM	R10_Jul2024_MD	1.5676E-08	1.3237E-07	4.1153E-08	9.7978E-08	5.0948E-08	6.1953E-08	1.9227E-08	0	0	6.1953E-08	1.9227E-08	0	0	5.5943E-10	5.4106E-10	4.5326E-08	1.6997E-08	9.2541E-08	5.288E-08	7.788E-09	6.3677E-09	5.5028E-09
Summer, hour 14	1:00 PM	1:59 PM	R10_Jul2024_MD	1.5676E-08	1.3237E-07	4.1153E-08	9.7978E-08	5.0948E-08	6.1953E-08	1.9227E-08	0	0	6.1953E-08	1.9227E-08	0	0	5.5943E-10	5.4106E-10	4.5326E-08	1.6997E-08	9.2541E-08	5.288E-08	7.788E-09	6.3677E-09	5.5028E-09
Summer, hour 15	2:00 PM	2:59 PM	R11_Jul2024_PM	2.7786E-08	3.7772E-08	7.4198E-08	4.3664E-08	1.1511E-07	2.157E-08	8.6279E-09	0	0	2.157E-08	8.6279E-09	0	0	2.5104E-10	2.428E-10	1.9059E-08	7.6234E-09	9.5908E-08	2.6682E-08	6.9337E-09	2.899E-09	4.5871E-09
Summer, hour 16	3:00 PM	3:59 PM	R11_Jul2024_PM	2.7786E-08	3.7772E-08	7.4198E-08	4.3664E-08	1.1511E-07	2.157E-08	8.6279E-09	0	0	2.157E-08	8.6279E-09	0	0	2.5104E-10	2.428E-10	1.9059E-08	7.6234E-09	9.5908E-08	2.6682E-08	6.9337E-09	2.899E-09	4.5871E-09
Summer, hour 17	4:00 PM	4:59 PM	R11_Jul2024_PM	2.7786E-08	3.7772E-08	7.4198E-08	4.3664E-08	1.1511E-07	2.157E-08	8.6279E-09	0	0	2.157E-08	8.6279E-09	0	0	2.5104E-10	2.428E-10	1.9059E-08	7.6234E-09	9.5908E-08	2.6682E-08	6.9337E-09	2.899E-09	4.5871E-09
Summer, hour 18	5:00 PM	5:59 PM	R11_Jul2024_PM	2.7786E-08	3.7772E-08	7.4198E-08	4.3664E-08	1.1511E-07	2.157E-08	8.6279E-09	0	0	2.157E-08	8.6279E-09	0	0	2.5104E-10	2.428E-10	1.9059E-08	7.6234E-09	9.5908E-08	2.6682E-08	6.9337E-09	2.899E-09	4.5871E-09
Summer, hour 19																									

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX E

AERMOD Model Input Summary

- PM2.5
- PM10
- NO2

AERMOD Model Options

Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Project Impact Scenario - PM2.5
CO	TITLETWO	Project title 2	1241 W Division Street Proposed Development
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	24,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM25
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	T
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\ MSEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.SFC
ME	PROFFILE	Profile met file	C:\Users\ MSEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.PFL
ME	SURFDATA	Surf met data info.	14819 2016 2016-2020
ME	UAIRDATA	U-Air met data info.	94982 2016 2016-2020
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	188.4
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	

ME	WINDCATS	Wind speed cat. max.						
ME	SCIMBYHR	SCIM sample params						
EV	DAYTABLE	Print summary opt.	N/A					
OU	EVENTOUT	Output info. level	N/A					
OU	DAYTABLE	Print summary opt.	Table(2,2) / item /value /24					

Source Parameter Tables

All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
LINK6	AREAPOLY	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	(g/s-m**2)	1
LINK7	AREAPOLY	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	(g/s-m**2)	1
LINK44	AREAPOLY	Site Parking (Off-Network)	445519	4638964.5	178.4	1	(g/s-m**2)	1
LINK24	AREAPOLY	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	(g/s-m**2)	1
LINK25	AREAPOLY	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	(g/s-m**2)	1
LINK42	AREAPOLY	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	(g/s-m**2)	1
LINK36	AREAPOLY	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	(g/s-m**2)	1
LINK43	AREAPOLY	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	(g/s-m**2)	1
LINK37	AREAPOLY	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	(g/s-m**2)	1
SHL1	AREAPOLY	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	(g/s-m**2)	12
SHL2	AREAPOLY	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	(g/s-m**2)	24
LINK8	LINE	Division St, West Direction, Between Elston Ave and N Branch St	445399.4	4639276.3	177.36	1	(g/s-m**2)	1
LINK2	LINE	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	(g/s-m**2)	1
LINK5	LINE	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	(g/s-m**2)	1
LINK3	LINE	Prop Drwy, Inbound	445290.6	4639139.1	183	1	(g/s-m**2)	1
LINK4	LINE	Prop Drwy, Outbound	445285.3	4639139.3	183	1	(g/s-m**2)	1
LINK1	LINE	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	(g/s-m**2)	1
LINK9	LINE	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	(g/s-m**2)	1
LINK13	LINE	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	(g/s-m**2)	1
LINK12	LINE	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	(g/s-m**2)	1
LINK16	LINE	Elston Ave, South Direction,	445395.3	4639258.9	179.22	1	(g/s-m**2)	1

		Between Signal and North Prop Drwy						
LINK17	LINE	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	(g/s-m**2)	1
LINK18	LINE	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	(g/s-m**2)	1
LINK19	LINE	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	(g/s-m**2)	1
LINK20	LINE	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	(g/s-m**2)	1
LINK21	LINE	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	(g/s-m**2)	1
LINK22	LINE	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	(g/s-m**2)	1
LINK23	LINE	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	(g/s-m**2)	1
LINK26	LINE	Cortez St, West Direction	445368.6	4638958.8	183.03	1	(g/s-m**2)	1
LINK27	LINE	Cortez St, East Direction	445368.7	4638953	183.02	1	(g/s-m**2)	1
LINK28	LINE	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	(g/s-m**2)	1
LINK29	LINE	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	(g/s-m**2)	1
LINK32	LINE	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	(g/s-m**2)	1
LINK33	LINE	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	(g/s-m**2)	1
LINK40	LINE	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	(g/s-m**2)	1
LINK41	LINE	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	(g/s-m**2)	1
LINK38	LINE	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	(g/s-m**2)	1
LINK39	LINE	Division St, East Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444632.9	4639256.9	185	1	(g/s-m**2)	1

Polygon Area Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	Vertices	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	#	(m)
LINK6	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	1	8	0
LINK7	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	1	8	0
LINK44	Site Parking (Off-Network)	445519	4638964.5	178.4	1	1	16	0
LINK24	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	1	7	0
LINK25	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	1	7	0
LINK42	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	1	19	0
LINK36	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	1	22	0
LINK43	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	1	19	0
LINK37	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	1	21	0
SHL1	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	12	15	0
SHL2	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	24	15	0

EPA Line Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	End X	End Y	Width	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	(m)	(m)	(m)	(m)
LINK8	Division St, West Direction, Between	445399.4	4639276.3	177.36	1	1	6	0	445629.4	4639277

	Elston Ave and N Branch St									
LINK2	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	1	6	0	445286.8	4639267
LINK5	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	1	6	0	445389	4639267
LINK3	Prop Drwy, Inbound	445290.6	4639139.1	183	1	1	6	0	445290.6	4639260
LINK4	Prop Drwy, Outbound	445285.3	4639139.3	183	1	1	6	0	445285.3	4639260
LINK1	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	1	6	0	445385.5	4639274
LINK9	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	1	6	0	445629.6	4639269
LINK13	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	1	6	0	446236.4	4639288
LINK12	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	1	6	0	446236.5	4639282
LINK16	Elston Ave, South Direction, Between Signal and North Prop Drwy	445395.3	4639258.9	179.22	1	1	6	0	445477.6	4639125
LINK17	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	1	6	0	445484.5	4639127
LINK18	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	1	6	0	445365	4639066
LINK19	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	1	6	0	445367	4639061
LINK20	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	1	6	0	445503.5	4639076
LINK21	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	1	6	0	445508.9	4639078
LINK22	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	1	6	0	445451	4639050
LINK23	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	1	6	0	445453	4639046
LINK26	Cortez St, West Direction	445368.6	4638958.8	183.03	1	1	6	0	445518.6	4638959
LINK27	Cortez St, East Direction	445368.7	4638953	183.02	1	1	6	0	445518.7	4638954
LINK28	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	1	6	0	445524.1	4638956
LINK29	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	1	6	0	445532.1	4638956
LINK32	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	1	6	0	445529.1	4638866
LINK33	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	1	6	0	445537.1	4638866
LINK40	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	1	6	0	445202.1	4639274
LINK41	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	1	6	0	445200.2	4639266
LINK38	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	1	6	0	445133.2	4639272
LINK39	Division St, East Direction, Between I-	444632.9	4639256.9	185	1	1	6	0	445132.9	4639265

90/I-94 East Bound and
N Milwaukee Ave

AERMOD Model Options

Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Project Impact Scenario - PM10
CO	TITLETWO	Project title 2	1241 W Division Street Proposed Development
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	24,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	PM10
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	T
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\ MSEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.SFC
ME	PROFFILE	Profile met file	C:\Users\ MSEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.PFL
ME	SURFDATA	Surf met data info.	14819 2016 2016-2020
ME	UAIRDATA	U-Air met data info.	94982 2016 2016-2020
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	188.4
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	

ME	WINDCATS	Wind speed cat. max.						
ME	SCIMBYHR	SCIM sample params						
EV	DAYTABLE	Print summary opt.	N/A					
OU	EVENTOUT	Output info. level	N/A					
OU	DAYTABLE	Print summary opt.	Table(2,2) / item /value /24					

Source Parameter Tables

All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
LINK6	AREAPOLY	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	(g/s-m**2)	1
LINK7	AREAPOLY	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	(g/s-m**2)	1
LINK44	AREAPOLY	Site Parking (Off-Network)	445519	4638964.5	178.4	1	(g/s-m**2)	1
LINK24	AREAPOLY	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	(g/s-m**2)	1
LINK25	AREAPOLY	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	(g/s-m**2)	1
LINK42	AREAPOLY	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	(g/s-m**2)	1
LINK36	AREAPOLY	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	(g/s-m**2)	1
LINK43	AREAPOLY	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	(g/s-m**2)	1
LINK37	AREAPOLY	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	(g/s-m**2)	1
SHL1	AREAPOLY	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	(g/s-m**2)	12
SHL2	AREAPOLY	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	(g/s-m**2)	24
LINK8	LINE	Division St, West Direction, Between Elston Ave and N Branch St	445399.4	4639276.3	177.36	1	(g/s-m**2)	1
LINK2	LINE	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	(g/s-m**2)	1
LINK5	LINE	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	(g/s-m**2)	1
LINK3	LINE	Prop Drwy, Inbound	445290.6	4639139.1	183	1	(g/s-m**2)	1
LINK4	LINE	Prop Drwy, Outbound	445285.3	4639139.3	183	1	(g/s-m**2)	1
LINK1	LINE	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	(g/s-m**2)	1
LINK9	LINE	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	(g/s-m**2)	1
LINK13	LINE	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	(g/s-m**2)	1
LINK12	LINE	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	(g/s-m**2)	1
LINK16	LINE	Elston Ave, South Direction,	445395.3	4639258.9	179.22	1	(g/s-m**2)	1

		Between Signal and North Prop Drwy						
LINK17	LINE	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	(g/s-m**2)	1
LINK18	LINE	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	(g/s-m**2)	1
LINK19	LINE	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	(g/s-m**2)	1
LINK20	LINE	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	(g/s-m**2)	1
LINK21	LINE	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	(g/s-m**2)	1
LINK22	LINE	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	(g/s-m**2)	1
LINK23	LINE	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	(g/s-m**2)	1
LINK26	LINE	Cortez St, West Direction	445368.6	4638958.8	183.03	1	(g/s-m**2)	1
LINK27	LINE	Cortez St, East Direction	445368.7	4638953	183.02	1	(g/s-m**2)	1
LINK28	LINE	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	(g/s-m**2)	1
LINK29	LINE	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	(g/s-m**2)	1
LINK32	LINE	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	(g/s-m**2)	1
LINK33	LINE	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	(g/s-m**2)	1
LINK40	LINE	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	(g/s-m**2)	1
LINK41	LINE	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	(g/s-m**2)	1
LINK38	LINE	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	(g/s-m**2)	1
LINK39	LINE	Division St, East Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444632.9	4639256.9	185	1	(g/s-m**2)	1

Polygon Area Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	Vertices	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	#	(m)
LINK6	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	1	8	0
LINK7	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	1	8	0
LINK44	Site Parking (Off-Network)	445519	4638964.5	178.4	1	1	16	0
LINK24	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	1	7	0
LINK25	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	1	7	0
LINK42	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	1	19	0
LINK36	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	1	22	0
LINK43	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	1	19	0
LINK37	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	1	21	0
SHL1	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	12	15	0
SHL2	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	2.31441E-07	24	15	0

EPA Line Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	End X	End Y	Width	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	(m)	(m)	(m)	(m)
LINK8	Division St, West Direction, Between	445399.4	4639276.3	177.36	1	1	6	0	445629.4	4639277

	Elston Ave and N Branch St									
LINK2	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	1	6	0	445286.8	4639267
LINK5	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	1	6	0	445389	4639267
LINK3	Prop Drwy, Inbound	445290.6	4639139.1	183	1	1	6	0	445290.6	4639260
LINK4	Prop Drwy, Outbound	445285.3	4639139.3	183	1	1	6	0	445285.3	4639260
LINK1	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	1	6	0	445385.5	4639274
LINK9	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	1	6	0	445629.6	4639269
LINK13	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	1	6	0	446236.4	4639288
LINK12	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	1	6	0	446236.5	4639282
LINK16	Elston Ave, South Direction, Between Signal and North Prop Drwy	445395.3	4639258.9	179.22	1	1	6	0	445477.6	4639125
LINK17	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	1	6	0	445484.5	4639127
LINK18	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	1	6	0	445365	4639066
LINK19	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	1	6	0	445367	4639061
LINK20	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	1	6	0	445503.5	4639076
LINK21	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	1	6	0	445508.9	4639078
LINK22	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	1	6	0	445451	4639050
LINK23	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	1	6	0	445453	4639046
LINK26	Cortez St, West Direction	445368.6	4638958.8	183.03	1	1	6	0	445518.6	4638959
LINK27	Cortez St, East Direction	445368.7	4638953	183.02	1	1	6	0	445518.7	4638954
LINK28	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	1	6	0	445524.1	4638956
LINK29	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	1	6	0	445532.1	4638956
LINK32	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	1	6	0	445529.1	4638866
LINK33	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	1	6	0	445537.1	4638866
LINK40	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	1	6	0	445202.1	4639274
LINK41	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	1	6	0	445200.2	4639266
LINK38	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	1	6	0	445133.2	4639272
LINK39	Division St, East Direction, Between I-	444632.9	4639256.9	185	1	1	6	0	445132.9	4639265

90/I-94 East Bound and
N Milwaukee Ave

AERMOD Model Options

Model Options

Pathway	Keyword	Description	Value
CO	TITLEONE	Project title 1	Project Impact Scenario - NO2
CO	TITLETWO	Project title 2	1241 W Division Street Proposed Development
CO	MODELOPT	Model options	DFAULT,CONC,NODRYDPLT,NOWETDPLT
CO	AVERTIME	Averaging times	1,24,ANNUAL
CO	URBANOPT	Urban options	
CO	POLLUTID	Pollutant ID	NO2
CO	HALFLIFE	Half life	
CO	DCAYCOEF	Decay coefficient	
CO	FLAGPOLE	Flagpole receptor heights	1.8
CO	RUNORNOT	Run or Not	RUN
CO	EVENTFIL	Event file	F
CO	SAVEFILE	Save file	T
CO	INITFILE	Initialization file	
CO	MULTYEAR	Multiple year option	N/A
CO	DEBUGOPT	Debug options	N/A
CO	ERRORFIL	Error file	F
SO	ELEVUNIT	Elevation units	METERS
SO	EMISUNIT	Emission units	N/A
RE	ELEVUNIT	Elevation units	METERS
ME	SURFFILE	Surface met file	C:\Users\SEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.SFC
ME	PROFFILE	Profile met file	C:\Users\SEYED~1\DOCUME~1\1241WD~1\METAND~1\KMDW16~1\KMDW1620\SURFACE_2016-2020_MERGED.PFL
ME	SURFDATA	Surf met data info.	14819 2016 2016-2020
ME	UAIRDATA	U-Air met data info.	94982 2016 2016-2020
ME	SITEDATA	On-site met data info.	
ME	PROFBASE	Elev. above MSL	188.4
ME	STARTEND	Start-end met dates	
ME	WDROTATE	Wind dir. rot. adjust.	

ME	WINDCATS	Wind speed cat. max.						
ME	SCIMBYHR	SCIM sample params						
EV	DAYTABLE	Print summary opt.	N/A					
OU	EVENTOUT	Output info. level	N/A					
OU	DAYTABLE	Print summary opt.	Table(2,3) / /item /item /value /1 /24					

Source Parameter Tables

All Sources

Source ID / Pollutant ID	Source Type	Description	UTM		Elev. (m)	Emiss. Rate	Emiss. Units	Release Height (m)
			East (m)	North (m)				
LINK6	AREAPOLY	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	(g/s-m**2)	1
LINK7	AREAPOLY	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	(g/s-m**2)	1
LINK44	AREAPOLY	Site Parking (Off-Network)	445519	4638964.5	178.4	1	(g/s-m**2)	1
LINK24	AREAPOLY	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	(g/s-m**2)	1
LINK25	AREAPOLY	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	(g/s-m**2)	1
LINK42	AREAPOLY	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	(g/s-m**2)	1
LINK36	AREAPOLY	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	(g/s-m**2)	1
LINK43	AREAPOLY	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	(g/s-m**2)	1
LINK37	AREAPOLY	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	(g/s-m**2)	1
SHL1	AREAPOLY	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	3.04527E-06	(g/s-m**2)	12
SHL2	AREAPOLY	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	3.04527E-06	(g/s-m**2)	24
LINK8	LINE	Division St, West Direction, Between Elston Ave and N Branch St	445399.4	4639276.3	177.36	1	(g/s-m**2)	1
LINK2	LINE	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	(g/s-m**2)	1
LINK5	LINE	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	(g/s-m**2)	1
LINK3	LINE	Prop Drwy, Inbound	445290.6	4639139.1	183	1	(g/s-m**2)	1
LINK4	LINE	Prop Drwy, Outbound	445285.3	4639139.3	183	1	(g/s-m**2)	1
LINK1	LINE	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	(g/s-m**2)	1
LINK9	LINE	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	(g/s-m**2)	1
LINK13	LINE	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	(g/s-m**2)	1
LINK12	LINE	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	(g/s-m**2)	1
LINK16	LINE	Elston Ave, South Direction,	445395.3	4639258.9	179.22	1	(g/s-m**2)	1

		Between Signal and North Prop Drwy						
LINK17	LINE	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	(g/s-m**2)	1
LINK18	LINE	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	(g/s-m**2)	1
LINK19	LINE	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	(g/s-m**2)	1
LINK20	LINE	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	(g/s-m**2)	1
LINK21	LINE	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	(g/s-m**2)	1
LINK22	LINE	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	(g/s-m**2)	1
LINK23	LINE	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	(g/s-m**2)	1
LINK26	LINE	Cortez St, West Direction	445368.6	4638958.8	183.03	1	(g/s-m**2)	1
LINK27	LINE	Cortez St, East Direction	445368.7	4638953	183.02	1	(g/s-m**2)	1
LINK28	LINE	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	(g/s-m**2)	1
LINK29	LINE	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	(g/s-m**2)	1
LINK32	LINE	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	(g/s-m**2)	1
LINK33	LINE	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	(g/s-m**2)	1
LINK40	LINE	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	(g/s-m**2)	1
LINK41	LINE	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	(g/s-m**2)	1
LINK38	LINE	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	(g/s-m**2)	1
LINK39	LINE	Division St, East Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444632.9	4639256.9	185	1	(g/s-m**2)	1

Polygon Area Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	Vertices	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	#	(m)
LINK6	Elston Ave, South Direction, North of Signal	445251.6	4639694.1	178.11	1	1	8	0
LINK7	Elston Ave, North Direction, North of Signal	445259	4639693.7	177.46	1	1	8	0
LINK44	Site Parking (Off-Network)	445519	4638964.5	178.4	1	1	16	0
LINK24	Elston Ave, South Direction, Between South Prop Drwy and Cortez St	445501.6	4639071.2	179.26	1	1	7	0
LINK25	Elston Ave, North Direction, Between South Prop Drwy and Cortez St	445509.2	4639074.3	179	1	1	7	0
LINK42	I-90/I-94 East Bound, North Direction, North of Division St	445199	4639279.5	180.12	1	1	19	0
LINK36	I-90/I-94 East Bound, South Direction, North of Division St	445160.2	4639279.5	183.19	1	1	22	0
LINK43	I-90/I-94 East Bound, North Direction, South of Division St	445193.2	4639252.4	180.77	1	1	19	0
LINK37	I-90/I-94 East Bound, South Direction, South of Division St	445395.3	4638462.4	175.22	1	1	21	0
SHL1	Two Level 1 Space Heaters	445388.7	4639256.6	179.45	3.04527E-06	12	15	0
SHL2	Two Level 2 Space Heaters	445388.7	4639256.6	179.45	3.04527E-06	24	15	0

EPA Line Sources

Source ID / Pollutant ID	Description	UTM		Elev.	Emiss. Rate	Release Height	End X	End Y	Width	Init. Vert. Dim.
		East (m)	North (m)	(m)	(g/s-m**2)	(m)	(m)	(m)	(m)	(m)
LINK8	Division St, West Direction, Between	445399.4	4639276.3	177.36	1	1	6	0	445629.4	4639277

	Elston Ave and N Branch St									
LINK2	Division St, East Direction, Left of Stop Sign	445201.8	4639266.2	180.14	1	1	6	0	445286.8	4639267
LINK5	Division St, East Direction, Between Stop Sign and Signal	445289	4639266.4	182.86	1	1	6	0	445389	4639267
LINK3	Prop Drwy, Inbound	445290.6	4639139.1	183	1	1	6	0	445290.6	4639260
LINK4	Prop Drwy, Outbound	445285.3	4639139.3	183	1	1	6	0	445285.3	4639260
LINK1	Division St, West Direction, Left of Signal	445205.5	4639273.6	179.73	1	1	6	0	445385.5	4639274
LINK9	Division St, East Direction, Between Elston Ave and N Branch St	445399.6	4639269.1	178.04	1	1	6	0	445629.6	4639269
LINK13	Division St, West Direction, East of N Branch St (to N Halsted St)	445636.4	4639278.4	178.93	1	1	6	0	446236.4	4639288
LINK12	Division St, East Direction, East of N Branch St (to N Halsted St)	445636.5	4639270.3	178.52	1	1	6	0	446236.5	4639282
LINK16	Elston Ave, South Direction, Between Signal and North Prop Drwy	445395.3	4639258.9	179.22	1	1	6	0	445477.6	4639125
LINK17	Elston Ave, North Direction, Between Signal and North Prop Drwy	445402.9	4639259.4	178.84	1	1	6	0	445484.5	4639127
LINK18	North Prop Drwy Inbound	445470.8	4639117.6	177.85	1	1	6	0	445365	4639066
LINK19	North Prop Drwy Outbound	445472.9	4639113.4	178.01	1	1	6	0	445367	4639061
LINK20	Elston Ave, South Direction, Between North Prop Drwy and South Prop. Drwy.	445479.9	4639120.3	176.59	1	1	6	0	445503.5	4639076
LINK21	Elston Ave, North Direction, Between North Prop Drwy and South Prop. Drwy.	445485.4	4639123.1	175.62	1	1	6	0	445508.9	4639078
LINK22	South Prop Drwy Inbound	445493.8	4639073.8	179.48	1	1	6	0	445451	4639050
LINK23	South Prop Drwy Outbound	445495.9	4639069.6	179.49	1	1	6	0	445453	4639046
LINK26	Cortez St, West Direction	445368.6	4638958.8	183.03	1	1	6	0	445518.6	4638959
LINK27	Cortez St, East Direction	445368.7	4638953	183.02	1	1	6	0	445518.7	4638954
LINK28	Elston Ave, South Direction, Between Cortez St and Augusta Blvd	445529.1	4638867	180.38	1	1	6	0	445524.1	4638956
LINK29	Elston Ave, North Direction, Between Cortez St and Augusta Blvd	445537.1	4638867	180.46	1	1	6	0	445532.1	4638956
LINK32	Elston Ave, South Direction, South of Augusta Blvd (to N Milwaukee Ave)	445539.1	4638547.9	180.65	1	1	6	0	445529.1	4638866
LINK33	Elston Ave, North Direction, South of Augusta Blvd (to N Milwaukee Ave)	445547.1	4638548.4	180.54	1	1	6	0	445537.1	4638866
LINK40	Division St, West Direction, Between I-90/I-94 East and West Bounds	445137.1	4639272.7	183.64	1	1	6	0	445202.1	4639274
LINK41	Division St, East Direction, Between I-90/I-94 East and West Bounds	445135.2	4639265.3	183.4	1	1	6	0	445200.2	4639266
LINK38	Division St, West Direction, Between I-90/I-94 East Bound and N Milwaukee Ave	444633.2	4639265.1	184.98	1	1	6	0	445133.2	4639272
LINK39	Division St, East Direction, Between I-	444632.9	4639256.9	185	1	1	6	0	445132.9	4639265

90/I-94 East Bound and
N Milwaukee Ave

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX F

AERMOD Model Results Summary

- PM2.5
- PM10
- NO2

BREEZE AERMOD Model Results

Max. Annual (5 YEARS) Results of Pollutant: PM25 (ug/m**3)

Group ID	High	Avg. Conc.	UTM		Elev.	Hill Ht.	Flag Ht.	Rec. Type	Grid ID
			East (m)	North (m)	(m)	(m)	(m)		
ALL	1ST	0.09928	445473.30	4639118.50	177.50	182.00	1.80	DC	
	2ND	0.09429	445470.40	4639124.10	177.34	182.00	1.80	DC	
	3RD	0.08657	445430.54	4639238.52	179.25	179.25	1.80	DC	
	4TH	0.08517	445288.30	4639254.70	182.45	182.45	1.80	DC	
	5TH	0.08496	445460.50	4639140.00	178.41	181.00	1.80	DC	
	6TH	0.08259	445456.48	4639195.79	182.10	182.10	1.80	DC	
	7TH	0.08224	445443.68	4639217.27	180.42	180.42	1.80	DC	
	8TH	0.08162	445482.06	4639152.83	176.28	183.00	1.80	DC	
	9TH	0.08084	445469.27	4639174.31	179.93	182.00	1.80	DC	
	10TH	0.07944	445468.76	4639224.02	181.39	181.39	1.80	DC	

Maximum Period 24-HR Results Averaged Over (5 YEARS) of Pollutant: PM25 (ug/m**3)

Highest(Conc.)	Group ID	Highest(Receptor)	Avg. Conc.	UTM		Elevation	Hill Ht	Flag HT	Rec.Type	Grid ID
				East (m)	North (m)	(m)	(m)	(m)		
1ST-Highest	ALL	1ST	0.39268	445529.50	4639064.84	177.23	177.23	1.80	DC	
		2ND	0.38782	445508.00	4639052.00	177.80	177.80	1.80	DC	
		3RD	0.38441	445289.04	4639304.92	184.55	184.55	1.80	DC	
		4TH	0.38063	445517.93	4639087.00	178.25	178.25	1.80	DC	
		5TH	0.37235	445314.03	4639305.55	183.51	185.00	1.80	DC	
		6TH	0.36857	445344.50	4639381.35	176.95	185.00	1.80	DC	
		7TH	0.36783	445288.30	4639254.70	182.45	182.45	1.80	DC	
		8TH	0.36658	445354.66	4639406.62	177.22	177.22	1.80	DC	
		9TH	0.35655	445264.04	4639304.28	182.97	185.00	1.80	DC	
		10TH	0.35624	445257.40	4639150.50	182.05	182.05	1.80	DC	

Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
9	Warning Message(s)
553	Informational Message(s)
43848	Hours Were Processed
312	Calm Hours Identified
241	Missing Hours Identified (0.55 Percent)

Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK13
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK12
WARNING	ME	W186	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50

BREEZE AERMOD Model Results

Max. Annual (5 YEARS) Results of Pollutant: PM10 (ug/m**3)

Group ID	High	Avg. Conc.	UTM		Elev.	Hill Ht.	Flag Ht.	Rec. Type	Grid ID
			East (m)	North (m)	(m)	(m)	(m)		
ALL	1ST	0.20503	445473.30	4639118.50	177.50	182.00	1.80	DC	
	2ND	0.19140	445470.40	4639124.10	177.34	182.00	1.80	DC	
	3RD	0.18359	445288.30	4639254.70	182.45	182.45	1.80	DC	
	4TH	0.16332	445460.50	4639140.00	178.41	181.00	1.80	DC	
	5TH	0.15288	445482.06	4639152.83	176.28	183.00	1.80	DC	
	6TH	0.14470	445430.54	4639238.52	179.25	179.25	1.80	DC	
	7TH	0.14146	445519.30	4638963.70	178.38	178.38	1.80	DC	
	8TH	0.13878	445469.27	4639174.31	179.93	182.00	1.80	DC	
	9TH	0.13760	445494.80	4639131.32	174.99	183.00	1.80	DC	
	10TH	0.13663	445467.20	4638961.80	180.71	180.71	1.80	DC	

Highest Results of Pollutant: PM10

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev.	Hill Ht.	Flag Ht.	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)	(m)	(m)	(m)		
24-HR	ALL	1ST	Avg. Conc.	0.82729	ug/m**3	20120724	445473.30	4639118.50	177.50	182.00	1.80	DC	

Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
9	Warning Message(s)
553	Informational Message(s)
43848	Hours Were Processed
312	Calm Hours Identified
241	Missing Hours Identified (0.55 Percent)

Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK13
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK12
WARNING	ME	W186	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50

BREEZE AERMOD Model Results

Max. Annual (5 YEARS) Results of Pollutant: NO2 (ug/m**3)

Group ID	High	Avg. Conc.	UTM		Elev.	Hill Ht.	Flag Ht.	Rec. Type	Grid ID
			East (m)	North (m)	(m)	(m)	(m)		
ALL	1ST	0.86046	445468.76	4639224.02	181.39	181.39	1.80	DC	
	2ND	0.84622	445481.05	4639252.24	178.92	178.92	1.80	DC	
	3RD	0.83947	445456.48	4639195.79	182.10	182.10	1.80	DC	
	4TH	0.81311	445430.54	4639238.52	179.25	179.25	1.80	DC	
	5TH	0.80531	445478.77	4639300.81	176.32	176.32	1.80	DC	
	6TH	0.80368	445453.28	4639293.80	175.39	175.39	1.80	DC	
	7TH	0.79739	445443.68	4639217.27	180.42	180.42	1.80	DC	
	8TH	0.78751	445427.78	4639286.79	175.22	179.00	1.80	DC	
	9TH	0.78439	445506.64	4639209.29	179.10	182.00	1.80	DC	
	10TH	0.77716	445490.14	4639328.45	176.67	176.67	1.80	DC	

Highest Results of Pollutant: NO2

Avg. Per.	Grp ID	High	Type	Val	Units	Date	UTM		Elev.	Hill Ht.	Flag Ht.	Rec. Type	Grid ID
						YYMMDDHH	East (m)	North (m)	(m)	(m)	(m)		
1-HR	ALL	1ST	Avg. Conc.	43.23827	ug/m**3	18062806	445389.00	4639307.46	174.74	185.00	1.80	DC	
24-HR	ALL	1ST	Avg. Conc.	5.45117	ug/m**3	20013124	445354.66	4639406.62	177.22	177.22	1.80	DC	

Summary of Total Messages

#	Message Type
0	Fatal Error Message(s)
13	Warning Message(s)
553	Informational Message(s)
43848	Hours Were Processed
312	Calm Hours Identified
241	Missing Hours Identified (0.55 Percent)

Error & Warning Messages

Msg. Type	Pathway	Ref. #	Description
WARNING	CO	W361	Multiyear PERIOD/ANNUAL values for NO2/SO2 require MULTYEAR Opt
WARNING	CO	W362	Multiyear 1h NO2/SO2 processing not applicable for 24-hr Ave
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK13
WARNING	SO	W390	Aspect ratio (L/W) of LINE source greater than 100 LINK12
WARNING	ME	W186	THRESH_1MIN 1-min ASOS wind speed threshold used 0.50

www.breeze-software.com

**Air Quality Impact Statement (AQIS) Report
1241 W. Division Street, Chicago, Illinois**

APPENDIX G

AERMOD Model Electronic Run Files